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ABSTRACT

This document describes a training program for in-service homebound teachers and pre-service (master's degree) students designed to reduce teacher isolation from other professionals, and to define and maintain standards in a field with a rapidly changing pupil population. Purposes of the project are presented in four components: (1) cross-categorical training of master's degree candidates: the training of teachers for both cripples and other impaired children and emotionally distrubed children, with cross-disability training across a wide range of exceptionality. (2) re-education of homebound teachers: retraining of teachers originally trained to educate a population with single-disability problems. (3) Investigation of the diversity of the homebound pupil population: investigating the psychosomatic dimensions of a population which has shifted from the traditional physical health problem area to that of emotionally/socially disturbed. (4) The reintegration of homebound children: to establish procedures for reintegration and to delineate the facilitator role of the master's degree students and inservice homebound teachers. Realization of these components involves participation in seminars, workshops, and field experiences to develop teacher competencies in: (1) communication, (2) understanding of needs, (3) observational skills, (4) knowledge of child development, (5) knowledge of test instruments, (6) diagnostic skills, (7) prescriptive skills, and (8) instrument and materials development and modification. Project implementation, results, recommendations, and implications for each of the four components are described, and a general evaluative summary is presented. (MJB)

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REPORT OF

AN INTEGRATED TRAINING PROGRAM FOR IN-SERVICE AND PRE-SERVICE TEACHERS IN A SYSTEMS APPROACH TO HOME INSTRUCTION*

Teachers College, Columbia University
New York, New York 10027

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AN INTEGRATED TRAINING PROGRAM FOR IN-SERVICE AND PRE-SERVICE TEACHERS IN A SYSTEMS APPROACH TO HOME INSTRUCTION*

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For enabling us to carry out this experimental professional training endeavor, focusing on the education of children who were homebound because of emotional/social problems and/or physical or special health problems, we thank Dr. Herman Saettler of the Bureau for the Education of the Handicapped of the U.S. Office of Education. We truly appreciate his continuing personal and professional support.

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Chapter I

Introduction

Background and Need

Home instruction was originally instituted for the purpose of providing education to children who were deemed to be unable to attend school. For the most part, they had incapacitating physical deviations or health problems. A few manifested emotional difficulties such as "school phobia" due to early trauma in the school setting. Facial disfigurements, or other highly visible and generally nonacceptable physical characteristics often precluded the children's access to public transportation and/or existent school facilities. Cyesis, which was regarded as a condition requiring the protective environment of the home, was also considered justification for the expulsion from school of pregnant teenagers.

In general, the original homebound population, although limited in mobility, fell within the normal range of intelligence and required teachers skilled in the tutorial form of instruction. Instructional approaches were academically based and similar to those employed in school particularly for children at the secondary level (Lieman, 1969).

With the establishment of special schools and treatment units for children having cerebral palsy and other severely disabling conditions, other children with multiple handicaps of increasing severity became eligible for home instruction. At the same time, regular and special classes in schools were beginning to admit children with epilepsy and mild physical disabilities. Despite the expanded availability of in-school educational facilities for a population that had been excluded originally, home instruction programs continued to grow. There has evolved a shift from the original target population of home instruction

programs; the home was becoming an educational setting for children who were not considered "containable" in school. At the time of this project for example, 45 percent of the home instruction population in New York City consisted of referrals by the Bureau of Child Guidance of children diagnosed as emotionally disturbed or behaviorally disordered. The children and youth offered home instruction were distributed in three major categories of which the last was the largest: 1) severely crippled and other health impaired with multiple disabilities, 2) short term post-operative, physically injured or ill and 3) emotionally disturbed.

As a result of this shift in the home instruction population, some other important issues regarding the relevance and effectiveness of current teacher preparation programs for the homebound needed examination. Since almost 50 percent of the homebound population was designated "emotionally disturbed" could there be any justification for the presently designed teacher preparation programs that are directed only toward the education of crippled and other health impaired children?

The question of professional preparation for homebound teachers is not new (Levy, 1975). However, it is still not known what kind of training a home instructor can obtain to develop the personal qualities and professional competencies required. Suggestions have ranged from acquiring a background as a "regular teacher" (Meisgeier, 1965), apprenticeship to a "master home instructor teacher" (Connor, 1964), a sequential preparation in general and special education followed by a supervised practicum in homes and hospitals (Council for Exceptional Children, 1966), to continuing inservice education in home instruction (Wolinsky, 1970). Recent trends in teacher education in special education were identified in three related work conferences sponsored by the Bureau for Education of the Handicapped of the United States Office of Education. The leadership

in the field suggested that movement toward "generic core" preparation and teaching for a "multi-disciplinary approach" shows promise for the preparation of teachers who will be able to function in home situations as well as in other settings (Connor, Wald and Cohen, 1971). The second conference focused on the need for Competency-Based Teacher Education appropriate to the training of home instruction teachers (Connor and Cohen, 1973). The final work conference called for professional leadership in developing new models of teacher preparation and professional renewal for those working with homebound children (Connor, Rusalem and Baken, 1973).

Although the necessity for and the value of home instruction for much of the population is not open to question, certain aspects of the program needed reexamination. Wolinsky in the May, 1970 issue of Exceptional Children noted that:

> other professions build certain safeguards into their training programs because the problem of personal involvement beyond professional effectiveness is evident. However, the teacher of the homebound if often placed in this exacting situation without day to day professional contacts. How can we provide a safeguard against the contamination of a professional act which is removed from its historic professional milieu because of a definition of nonperformance pertaining to the children involved.

Wolinsky also asked:

> How are school districts helping those teachers who are assigned to home instruction maintain their professional expertise and, even more important, their professional identity through contact with colleagues? (Pp. 673-674.)

The homebound teacher practicing in the field is often isolated from the stimulation derived from interaction with other professionals in special education facilities, and has difficulty defining and maintaining standards

for home instruction.

Throughout the nation, special educators are endeavoring to broaden the base of responsibility for educating severely disabled children from the home to the community as evidenced by the Pennsylvania Court Decision regarding the Education of Children with Mental Retardation (May, 1972). A concomitant manifestation of this endeavor is found in the efforts of educators to move exceptional children from the isolation and segregation of some present academic placements to settings with broader bases for peer socialization. The Center for Multiple Handicapped Children, a New York City public school facility which enrolls children who have either been excluded from all other available educational placements or who have never previously attended school, is illustrative of the achievements being made in this direction.

These efforts toward integrating the exceptional child in an educational setting that is simultaneously most "normal" and the most consonant with his developmental needs raise issues of whether the customarily trained teacher is sufficiently cognizant and capable of handling this intended pupil influx and whether he has the competencies required to teach to the perspective of special education. The entry of exceptional children to schools is viewed as moving in a pyramidal shape, the most highly specialized setting that initially meets the child's needs being the base of the pyramid for this is where severely and multiple handicapped children are usually educated. As individual children are moved from this base setting to others containing diminishing degrees of exceptionality, less restriction and increasing degrees of normality, the least specialized setting in which the child can be accommodated is viewed as the atypical setting of his particular pyramid. Thus throughout the range of possible

educational settings, teachers appear to need cross-categorical training in special education, the degrees of such training being dependent on the frequency with which the teacher will be confronted by exceptionality. Present educational trends indicate that there will be a rise in such frequency.

In sum, educators of children who are homebound are still faced with the as yet unsolved problems of professional isolation and professional preparation at times, irrelevant to their pupil populations. Inclusion of children with emotional disturbance as well as those with severe and multiple disabilities together with recent societal pressures for integration of handicapped children and emphasis on school based programming have resulted in the recent concerns noted earlier. Colleges and universities in their search for new models of teacher preparation together with local public school leadership personnel directly accountable for teacher and pupil performance are seen as partners in creating new alternatives for homebound children and their teachers.

Purpose of the Project

In a cooperative endeavor with the New York City Board of Education, Teachers College, Columbia University provided a comprehensive cross-categorical training program for both inservice homebound teachers and preservice (master's degree) students employing the Teachers College Taxonomy of Instructional Treatments as the basic approach. The project was also designed to increase instructional time of homebound children and to facilitate their being placed in less restrictive educational settings for their schooling. The first year's training program (1971-1972) served as the pilot project upon which the 1972-1973 cooperative pre- and inservice training effort was built.

The purpose of the project fell into the following four components:

Component 1 - CROSS-CATEGORICAL TRAINING OF MASTERS DEGREE CANDIDATES

The Homebound Training Program from its inception focused on cross-categorical

training for masters degree students as was evident in the composition of the program's student population, i.e. sixteen masters degree students evenly distributed in the specialization of Crippled and Other Health Impaired (COHI) and Emotionally Disturbed (ED). The goal of cross-categorical training was deemed possible of attainment through the use of the Taxonomy of Instructional Treatment (see Appendix A and A-1) which is applicable to all types and degrees of exceptionality. The program's efforts were directed in large part to children confined to the educational setting which is most isolated and has the least potential for peer socialization--the child's home. Three of the field placements (The Center for Multiple Handicapped Children, The Philanthropic League, and United Cerebral Palsy Centers) made available to the masters students, served severely handicapped youngsters. These settings are at the base of the pyramid. whereas PS 41, is a regular elementary school serving emotionally disturbed children. Thus, this component of the program has two training elements: cross-disability and a wide range and degree of exceptionality.

Component 2 - REEDUCATION OF HOMEBOUND TEACHERS

The homebound teachers offered instruction to the three groups of children, i.e. 1) severely crippled and other health impaired children with multiple disabilities, 2) short term post-operative, physically injured or ill children and 3) emotionally disturbed children. Yet, the teacher preparation programs in which the homebound teachers were trained traditionally focused on a child population with a single disability. Therefore, their preparation become less appropriate as they are assigned to children has entirely different characteristics and needs. Furthermore, homebound teachers continued to practice in a setting that was isolated from the stimulation of interaction with educators in other special education

facilities and had difficulty defining and maintaining standards for home instruction.

The homebound teachers of the project received the same course and workshop content as the masters students. As stated previously, the primary instrument of training was the Taxonomy of Instructional Treatments (see Appendix A and A-1) which is applicable to all types and degrees of exceptionality. The program's activities provided opportunities for the homebound teachers to interact with the other members in the inservice/preservice program.

Component 3 - INVESTIGATION OF THE DIVERSITY OF THE HOMEBOUND PUPIL POPULATION

As noted earlier, in the course of its development, home instruction, originally initiated for children with physical deviations or health problems, has shifted to include services for emotionally and socially disturbed children. There is, then, considerable diversity in the psychosomatic dimensions of the population. The demographic data on the child population in the project (see Appendix B) demonstrates the magnitude of social variables. The diversity of pupils classified as homebound makes it difficult to isolate variables with the precision necessary to determine the effects of any single variable. Despite this limitation, some information was gathered on the effect of specific variables on the three disability groups (physically handicapped, chronic health impaired and emotionally disturbed). To this purpose Baken (1975) conducted an investigation in conjunction with this project, in which the disability groups were contrasted with respect to locus of control, academic achievement, and transfer to a group educational placement. The study examined these variables as they existed in a sample of the projects homebound population, to determine key factors which might be used to improve learning and return subjects to more normal school settings.

Component 4 - THE REINTEGRATION OF HOMEBOUND CHILDREN

Equally consonant with today's trends is the commitment to move the homebound child from the isolation of home instruction back to the classroom from which he has been ejected and to make classroom instruction available to the ambulatory COHI child to whom school admittance has been denied. A dialogue was initiated by Teachers College Special Education faculty with members of the New York City Bureau of Child Guidance. From the outset, a confluence of interest was apparent with the Bureau officials being as strongly in favor of this reintegration effort as was the Teachers College faculty. Conferences were held to establish the procedures for reintegration and to delineate the involvement of the masters degree students and homebound teachers who were viewed as possible facilitating agents of the reintegration process.

Populations

The program was a cooperative effort with collaborative planning between the New York City Board of Education's Bureau for the Physically Handicapped and Teachers College, Columbia University. The program was unique in its integrated training for three professional groups involved in teaching multiply handicapped children. The children served as the fourth population. The following groups were involved in the project:

- Two supervisors of home instruction teachers selected cooperatively by Professors Frances Connor and Abraham Tannenbaum (Coordinators of Teachers College Programs for the Crippled and Other Health Impaired and the Emotionally Disturbed, respectively) and the administrators of the City's Bureau for Education of the Physically Handicapped. The selection procedure included an interview to determine the candidate's willingness to stay with the project until its termination, his/her commitment to

change and the nature of his commitment to the multiply handicapped population with a view toward moving the child from the isolation of the home instruction setting.

- Eight inservice teachers of homebound children were nominated by their supervisors and interviewed by Teachers College faculty. The purpose of the interview was to determine an attitudinal set consistent with the criteria used for selecting supervisors (see 1 above). These teachers received eight points of graduate credit for participating in the full scope of the program.
- Sixteen preservice masters degree students admitted to either COHI or ED training programs were selected by Professors Connor and Tannenbaum on the basis of the students' interest in cross-categorical training, in-depth individualization of instruction and children with multiple handicaps. Students' previous academic achievement, commitment to handicapped children as demonstrated by prior volunteer work and/or job experience in education were the basic considerations in the selection process. Each student selected for the program received a letter (see Appendix C) that contained a brief description of the program to aid him/her in arriving at a decision from Professor Connor. A member of the staff was accessible for further clarification of the program.
- Target population sample. Involved in the project for the training of inservice and preservice teachers were the children assigned by the Board of Education to home instruction. The particular children on the registers of the project's eight homebound teachers formed the target population.

The sample included all youngsters of at least seven years of age who were assigned to the home instruction project supervisors during the academic

year 1972-1973. Of the 81 subjects 39 were Black, 26 non-continental White (NCW), and 16 white. (A summary of the characteristics of the same is in Appendix B.) The sample used in this study covered the full range of intellectual ability and degree of handicapping condition that might be expected on home instruction. Represented was a greater number of boys than girls; a majority of students came from families of low socio-economic status.

The participating subjects fell into three major disability categories. Thirty-seven of the students referred for home instruction were considered emotionally disturbed. Thirty subjects had orthopedic and/or neuro muscular disabilities (physically handicapped), and the remaining fourteen children received instruction at home because of acute or chronic health impairment.

The mean chronological age of the sample was 13.9 years, with an age range from 7.6 to 20.4 years. The IQ scores (derived from the PPVT) ranged from 33 to 137 with the mean IQ of 84.62. Data on academic achievement showed that the homebound children in this sample performed somewhat lower than their non-handicapped age peers. The teachers' estimates of socio-economic status placed the population in lower through middle class.

When the samples of the three disability groups (emotionally disturbed, physically handicapped and health impaired) were subjected to analyses, they were statistically homogeneous in regard to chronological age, IQ, socio-economic status, race and length of time spent on home instruction.

Staff

The staff of the program comprised the following: codirectors who maintained overall management and accountability for the program with access to the students in terms of advisement, lectures on the content in their respective field of COHI and ED and general guidance with any problems; a project coordinator,

responsible for the daily operation of the program including the placements of the students and the coordination of their weekly seminar; an administrative assistant, responsible to the project coordinator who took care of the numerous details of scheduling and general expediting; an associate, whose primary function was one of materials facilitation; and four instruction assistants who supervised the field work of the sixteen masters degree students. The instructional assistants, (IA) one for each four students, were available to observe the students in the field and to act as the professional resource to them and to the four licensed cooperating teachers at New York City Board of Education's Center for the Multiple Handicapped who served as Teachers College demonstration instructors and workshop leaders for the masters degree students using the Center as one of their field experiences. In addition an outside evaluator met regularly with all participants of the project in the capacity of consultant. The evaluator also was assigned the task of designing ways of assessing the overall effectiveness of the project.

Community Facilities

In addition to the on-campus Teachers College facilities and those in the homes of the participtaing children, three major community facilities served as major professional training centers.

PS 41 (Karen Horney Project) is a New York City Board of Education elementary school setting for experimental instructional and mental health intervention by the Karen Horney Clinic. It is located on Manhattan's east side.

Number of elementary age children	60
Number of teacher or clinicians with masters degree	6

The Center for Multiple Handicapped Children, a New York City Board of Education school serving severely handicapped children and adolescents

from the New York Metropolitan area.

Number of pre-school children	22
Number of elementary age children	61
Number of secondary age children	11
Number of teachers and clinicians	27
Number of teachers and clinicians with masters degree	14

New York Philanthropic League, a private community agency serving pre-school severely physically disabled children (five days weekly) and severely/profoundly handicapped boys and girls, essentially from the inner city (two days weekly).

Number of pre-school children	10
Number of elementary age children	25
Number of secondary age children	30
Number of teachers and clinicians	8
Number of teachers and clinicians with masters degree	4

Chapter II

Project Implementation

During the project, the eight New York City teachers of homebound children and the sixteen full-time preservice students participated in a series of systematically planned seminars, workshops and field experiences. The two supervisors attended the seminars. The four inservice (classroom) teachers at the Center for the Multiple Handicapped Children participated at key points in the over-all training programs for the three other populations.

Program Objectives

The substance of this prototypic training program was enunciated through a three part chart that was submitted as an addendum to the original proposal dated March 1, 1971. The first section of the chart, an enumeration of the skills and knowledge (other than academic content) required of the practicing teacher of handicapped populations, was viewed as a statement of the program's objectives. Thus with this perspective, an examination of the seminar's content and the students' use of this content in their field experiences signifies the degree of achieved intent. The chart was annotated during the course of the year to show implementation progress as it unfolded (see Appendix D).

The skills and knowledge to be developed as competencies were as follows:

Item A. Knowledge of the components of the communication process (Sub-Item 1-7). This content was the major focus of two lectures and an item on two examinations; masters students were required

to describe incidents in the field in terms of the precipitants and consequences of static in the system. In addition wherever possible, avoidance of static techniques was recommended.

Item B. Knowledge of the nature and needs of handicapped populations. This was the foundation of every seminar but only in terms of the handicapped child as an individual. The Teachers College Taxonomy of Instructional Treatment was the principal instructional vehicle: the specific objectives of this program base appear in Appendix E. The nature and needs of the handicapped child as a member of a unique group was the central theme of a series of seminars led by lecturers from the various areas of specialization in the Department of Special Education, the topics of which are in Appendix F.

Item C. Observational skills as applied to both the teacher and the child. They were directed primarily toward the latter. From the onset of the program, the masters students recorded their observations of children in the form of diaries in which behavioral objectives were specified and the children's responses classified in the following four ways: expected inappropriate, unexpected inappropriate, unexpected appropriate, expected appropriate. Observation in terms of the last four variables of the Taxonomy (Instructional Setting, Instructional Format, Input, Output) as shown in Appendix A was standardized in workshops. Discussions of the coding system followed observations and video taped instructional sessions. But, the

procedures for recording the taxonomic observations as applied to teachers and children remained to be taught in the next half of the program and students were then given opportunities to practice these recording techniques in the field.

Item D. Knowledge of child development (Sub-Items 1-5) as mediated by the taxonomic structure. It was a recurrent target, either centrally or tangentially, throughout the lectures. The staff anticipated that the designated components of this discipline (see Appendix D) would receive the attention of the lectures previously mentioned and would be presented within the structure of the faculty member's area of specialization.

Item E. Knowledge of test instruments (Sub-Items 1-6). A substantial part of this content is presented in TE3130, Tests and Remedial Work for the Handicapped, a required course for special education masters degree students, wherein concentrated effort was placed on learning the evaluative and diagnostic aspects of educationally relevant evaluation instruments, including the Illinois Test of Psycholinguistic Abilities (ITPA). In addition to the course content of TE3130, The Homebound Training Bloc provided the inservice teachers and masters degree students with instruction in the administration and interpretation of the Wide Range Achievement Test (WRAT), the Peabody Picture Vocabulary Test (PPVT), the Wepman Auditory Discrimination Test and Morrison's Children's Internal-External Control Scale of Reinforcement (CIE).

Modified procedures were established for children whose handicapping conditions precluded effective use of the standardized form of test administration. The masters students were required to administer these instruments to and interpret the test results of three children.

Upon the resumption of classes after the January intercession, attention was directed to the social and emotional assessment of the target population. Subtests of the Bower and Lambert method of identifying emotionally disturbed children, A Process for In-School Screening of Children with Emotional Handicaps, was discussed and demonstrated, and the masters degree students had the opportunity to administer the subtests in the children's homes.

A portion of the lectures scheduled in the education of sensorily impaired children was presented by faculty members engaged in the specializations (hearing impaired and visually handicapped) to the inservice teachers and masters degree students in the homebound program. The content focused on measurements of physiological functioning such as visual and auditory acuity. Attaining an understanding of the terms and principles of these instruments and the educational implications to be drawn from was intended rather than proficiency of test administration. The degree of knowledge attained by the graduate students and the teachers from these lectures was assessed by

a written examination. The competence with which the masters students applied this knowledge in the field was more difficult to determine because effectiveness of its application was dependent upon experience with sensorily impaired children.

Item F. Diagnostic Skills (Sub-Items 1-5). The master students' development of diagnostic skills was an objective shared with TE3130. In this course, diagnostic competency was seen as encompassing skill in utilizing functional behavioral analysis techniques for diagnostic purposes; in selecting the appropriate diagnostic approach to a given problem; in interpreting diagnostic hypotheses derived from multiple sources; in formulating diagnostic hypotheses; in developing anecdotal and graphic representations of diagnostic information and in translating diagnostic hypotheses into specific educational plans. It was at this last point, translating diagnostic hypotheses into specific educational plans, that the two courses intersected with little overlaping of effect since educational planning based on diagnostic data as practiced in the Homebound Training Program was done within the structure of the Taxonomy (see Appendix A). Therefore, in the Homebound Training Project, the masters degree students' ability to formulate educational plans was based not only on their skill in collecting and applying diagnostic data but upon correlating it with their knowledge and understanding of taxonomic theory, terms and practices as well. Two examinations

were conducted to measure the effectiveness with which the content had been presented to the class members.

Item G, H, and J. Skill in prescribing instruction, in instructional experimentation and in evaluating an instructional act respectively. These skills were viewed as variations on a single theme; they were interrelated and interdependent. Development of competence was considered a function of continual practice in the field. Since the masters students had been assigned three field placements for the academic year, there was ample opportunity for them to acquire these skills.

Level of achieved competence was determined either by means of taxonomic observations that yielded indices of the child's engagement in carrying out the prescription or by comparing the child's terminal behavior with the stated behavioral objective of the prescription.

Item I. Skill in modifying or originating testing instruments and materials for the handicapped population. As stated previously, modifications of the test procedures for the Wide Range Achievement Test, the Peabody Picture Vocabulary Test and the Wepman Auditory Discrimination Test were made for children whose handicapping condition precluded the use of standardized procedures. In the course of developing the skills of Items G, H, and J, it was necessary for the masters students to create or modify materials for these instructional prescriptions. The materials were judged in terms of how effectively they seemed to

enhance the learning task for which they were designed.

The training program based upon the stated objectives (skill and knowledge competencies) was viewed by the staff as a three-phase process having the following dimensions:

Program Dimension I--Receptive Experiences (Seminars)

Five weekly four hour seminars were held each semester in conjunction with the New York City Board of Education's Center for Multiple Handicapped Children. The purpose of the seminars was the orientation of participants (sixteen pre-service students, eight home instructors, and two Board of Education supervisors) to the system of individualized instruction. (The Teachers College Taxonomy of Instructional Treatment.) In these sessions the participants were introduced to observational techniques, psycho-social educational measurements and the diagnostic skills prerequisite to implementing the instructional approach as well as pre- and post-testing for evaluation purposes.

Concurrent with the seminars and demonstrations, the preservice students and homebound teachers, as they reached specific test administration and analysis criteria, initiated their testing and instruction programs for the homebound children. It was anticipated that testing time would be a maximum of ten hours for each child over a period of two months. Thus, the preservice students began working within clearly delineated areas with children at the beginning of their training period.

Program Dimension II--Expressive Experiences (Workshops)

Five workshop sessions per semester were designed to enable the participants (sixteen preservice and eight homebound teachers) to use the instructional system in:

a) developing teaching strategies for children's specific educational

handicaps and for a variety of content,

b) modifying available materials, curricula, and test instruments for the children as well as designing new materials and instruments as required,

c) employing, under supervision, mini-lessons that in other instructional settings have proven effective in modifying children's behavior.

The workshops also included supervised projections of strategies for new mini-lessons and participation in the filming of such mini-lessons in the Center's experimental classes.

Program Dimension III--Field Experiences (The Center for the Multiple Handicapped and Homebound Instructional Settings).

Field experience was an on-going component of the program. The sixteen preservice students received field experience in the Center and in children's homes; they also student taught in other group settings. In addition, the New York City Board of Education released the eight inservice teachers for five half days each semester to observe, use and evaluate accessment instruments, curricula, material and the application of theoretical models.

The following chart is the schedule of training events as they were presented to the trainees.

SCHEDULE OF TRAINING EVENTS -- 1972-1973

October -- November

Introduction to Taxonomy;
Psycho Educational Assessment;
Educational Diagnosis;
Observation of Child Behavior, Teacher Behavior, Interactional Behavior;
Observation of application of the Taxonomic approach

December -- January

Instructional Prescriptions;
Tutorial Experiences;
Use of Taxonomic Materials;
Multiply Handicapped Center;
Experimental Use of Taxonomic materials in Home Instruction;
Use of Existing Mini-Lessons

February -- April

Modification of Instruments, Curricula, Materials
Program Models as used with Individual Children;
Preparation of New Mini-Lessons

May

Re-assessment of Children by Teachers and T.C. Students

	Seminars	Workshops	Field Experiences
October	X		X
November	X		X
December		X	X
January		X	X
February	X		X
March		X	X
April		X	X
May	X		X

21.

The above program was equated with full-time study for the homebound teachers who a) continued to learn in a systematic fashion about the characteristics of their pupils, b) gained knowledge about and skill in using the Taxonomy of Instruction (a systems approach to teaching on the basis of the child's identified characteristics), c) became better acquainted with available commercial and teacher-made materials appropriate for the individual children, d) experimented with and modified the test instruments, curricula, materials and program models, e) used, modified and developed workable mini-lesson packages and f) determined achievement of their pupils before and after their own training period.

For the sixteen preservice students, this experience was considered the equivalent of about one-half of their full-time study during the academic year. It represented an integrated core of six points of graduate course credit per semester.

The Study of Homebound Children

Although the Homebound Project was oriented toward the cross-categorical training of preservice and inservice personnel, the effect of such training on the target pupil populations also was of concern and was viewed as the critical evidence of the efficacy of the training (see Component 3, page 7). This aspect of the project was investigated by Baken in her study of the 81 homebound pupils participating in this project.

This information and additional demographic data (see Appendix B) were collected by the Homebound Teachers and masters degree students from the children's records, through regular home visits and from New York City's Bureau for the Education of the Physically Handicapped. Test data collection was also effected by the trainees through the administration of the investigation's test battery (see Item E, page 14). The battery, data analyses and findings will be discussed in the Results Chapter.

Baken focused on the following: 1) the issue of whether the disability groups (emotionally disturbed, physically handicapped, and health impaired) which constitute the bulk of the homebound population, might not be separate populations responding to teaching strategies with significant differences in the amount of learning acquired. The conclusion was deemed crucial in modifying the training program. 2) Whether the unusual pattern of schooling offered the homebound child might not alter one's own perceptions and behaviors, and the extent to which one feels it possible to control material and social benefits through his/her own efforts to be as crucial as the first issue. Locus of control* was selected as one of the variables used to contrast the disability groups. Previous research has also indicated that relationships exist between locus of control and performance in learning situations. A number of studies have demonstrated that school children who show internal locus of control have higher achievement motivation, attain higher grades and obtain stronger scores on achievement tests.

At the simplest level, it could be hypothesized that the homebound child with decreased mobility and increased physical dependence will show a locus of control that is more externally oriented. However, recent studies have challenged the positive versus negative interpretation of internal versus external control. The thesis that scoring high in internal expectancy need not be positive but in fact an unrealistic and unhealthful appraisal of reality, as well as the converse, that focusing on external forces may be realistic of such a perception is based upon comprehension of life forces, with direct application to homebound youngsters.

*Locus of control, as defined by Battle and Rotter (1963), is a construct which "distributes individuals according to the degree to which they accept personal responsibility for what happens to them, in contrast to the attribution of responsibility to causes outside their control" (page 483).

In the light of these considerations, the following research questions were studied:

1. Is there a significant difference in the scores earned on the Children's Internal--External Control Scale of Reinforcement (CIE) by homebound children who have different medical classifications (emotionally disturbed, physically handicapped, health impaired)?
2. Is there a readily identifiable, underlying pattern of responses which might suggest a multi-dimentional interpretation of locus of control as it applies to children on home instruction?
3. In the homebound population, how is the locus of control related to chronological and mental age?
4. Is there a significant correlation between locus of contral and length of time spent on home instruction?
5. For children receiving educational instruction at home, is there a relationship between locus of control and academic achievement?
   a.) Do internals and externals show a significant difference with respect to the relationship between expected and actual achievement?
   b.) Are academic achievement gains related to whether the subject has been defined as internal or external?
6. Is the type of educational/therapeutic setting to which the homebound child is referred at the end of the academic year related to whether the child has been defined as internal or external?

The test battery (see Appendix G) devised for the training program in accordance with the testing and diagnostic competencies to be developed in the

preservice and postservice trainees and which were employed in data collection included the following:

1. Peabody Picture Vocabulary Test (PPVT).
2. Wide Range Achievement Test (WRAT).
3. Children's Internal-External Scale (CIE).

Disability categories were assigned on the basis of information in the child's record. Specific assessment information concerning type and severity of emotional disturbance was not available. Therefore, for the project, all children with this diagnosis were considered as a single group. Since medical diagnoses for the physically handicapped were available, this group was subdivided into subjects with ortho-neuro-muscular disabilities (hereinafter referred to as physically handicapped) and those with other acute and chronic health impairments.

On the basis of regular home visits, the project's homebound teachers and graduate students, performing the role of tutors, were asked to estimate a subject's socio-economic status. Estimates were based on appearance of the home and neighborhood as well as on information about living conditions. The occupational status of the "head of the household" was used as a second estimate of the socio-economic status of the children.

Chapter III

Results of the Project

The results of the Homebound pre and inservice cross-categorical training project have been reviewed within the framework of the four specified specified purposes of the project (see pages 5-8).

Component 1--Cross-Categorical Training of Masters Degree Candidates.

Component 2--Reeducation of Homebound Teachers.

Component 3--Investigation of the Diversity of Homebound Pupil Population.

Component 4--Reintegration of Homebound Children.

Component 1--CROSS-CATEGORICAL TRAINING

Four aspects of training were examined to evaluate the efficacy of the training components. Two of the aspects involved the perceptions of the trainees: masters degree candidates and homebound teachers. The former group recorded their sense of the program's value and judged the adequacy of their attainment of the specified competencies reflecting preparedness to enter the field as teachers. For reasons to be explained later, the homebound teachers made no self-evaluations and confined their statements to the evaluation of the masters degree student's field work. For the third aspect of the evaluation, the instructional assistants (IA's) recorded their sense of the program's value and judgment of the adequacy of the masters degree trainees attainment of competencies. The fourth aspect concentrated on the current employment

status and placement of the graduated masters degree students, and reflected their sense of the value of the program and their degree of professional preparedness after having been employed in the field for at least one year.

1. Masters Degree Candidates' Self-Evaluation

An instrument, entitled Student Reactionnaire (see Appendix H) listed the competencies (knowledge and skills) which the project directors had designated as relevant to professional roles as teachers and which graduate students ought to attain from their studies. Each student was required to evaluate each competency in terms of how important he/she thought it was to the success of educators generally in the area of special education. The continuum of appraisal was as follows: a) very important, b) fairly important, c) fairly unimportant, d) unimportant, e) don't know.

The second step in filling out the reactionnaire required the student's indicated perception of his/her preparedness in each competency (knowledge and skills). The continuum for rating preparedness was as follows: 1) very adequate, 2) fairly adequate, 3) fairly inadequate, 4) inadequate, 5) don't know.

The final step in completing the reactionnaire was the determination of where or how each student gained most of his exposure to each competency. The continuum for specifying the source of competence was as follows: a) prior to attending Teachers College, b) professional reading and/or use of other communication media during program at Teachers College, c) practicum experiences

(including related seminars), d) lecture and discussion related to course work, e) informal student--faculty contacts, f) other.

Since the masters students specialized in two different areas of special education (Crippled and Other Health Impaired and Emotionally Disturbed), each group received the reactionnaire completed by all students in that area of specialization. Although the forms were different, they were structurally similar. The data for the students specializing in crippled and other health impaired education appear in Table I; the data for students specializing in education for emotionally disturbed children are in Table II.

In analyzing the data, students' reactions to the questions on program value and their perceptions of preparedness immediately after completing the Teachers College program were grouped into three categories: positive reactions, negative reactions and reactions open to interpretation. A and B responses in Column 1 (Importance) were regarded as positive responses, C and D responses as negative, and E as responses open to interpretation. In Column 2 (Self-Evaluation) of the reactionnaire responses 1 and 2 were considered positive, 3 and 4 negative, 5 open to interpretation. In Column 3 (How Attained) designations b, c, d, and e, were regarded as attributable to student experiences through Teachers College, while designations a and f were interpreted as emerging from other sources.

Since each of the participating preservice trainee groups (Crippled and Other Health Impaired and Emotionally Disturbed) were given substantively different reactionnaires, each series was interpreted separately.

TABLE I

PERCEPTIONS OF COHI* STUDENTS ON IMPORTANCE OF AND THEIR ACQUISITION OF COMPETENCIES

		1. Importance of Competencies			2. Self-Evaluation in Competency Acquisition			Percent Acquiring Competency at Teachers College
	Number of Responses	Negative	Positive	Don't Know	Negative	Positive	Don't Know	
Foundations knowledge of:	168	6 (3.5%)	160 (95.2%)	2 (1.29%)	83 (49.4%)	80 (47.6%)	5 (2.9%)	88
Skills In:	72	1 (1.4%)	70 (97.2%)	1 (1.4%)	22 (30.6%)	43 (59.7%)	7 (9.7%)	84
Assessment of Learner Characteristics Knowledge Of:	96	2 (2.1%)	94 (97.9%)		27 (28.1%)	66 (68.7%)	3 (3.1%)	93
Skills In:	120	1 (0.8%)	118 (98.3%)	1 (0.8%)	24 (20.0%)	85 (70.8%)	11 (9.2%)	92
Behavior Management Knowledge Of:	60	1 (16.6%)	57 (95.0%)	2 (3.3%)	16 (26.7%)	36 (60.0%)	8 (13.3%)	86
Skills In:	60	2 (3.3%)	57 (95.0%)	1 (1.7%)	15 (25.0%)	37 (61.7%)	8 (13. %)	87
Instruction Knowledge Of:	60	2 (3.3%)	57 (95.0%)	1 (1.7%)	12 (20.0%)	48 (80.0%)		89
Skills In:	132	3 (2.3%)	124 (93.9%)	5 (3.8%)	21 (15.9%)	90 (68.2%)	21 (15.9%)	90
Guidance Knowledge Of:	96	5 (5.2%)	84 (87.5%)	7 (7.2%)	28 (29.1%)	61 (63.5%)	7 (7.2%)	79
Skills In:	60	1 (1.5%)	59 (98.5%)		18 (30.0%)	29 (48.3%)	9 (15.0%)	64
Professionalism Knowledge Of:	48	1 (2.0%)	44 (91.6%)	3 (6.2%)	20 (41.6%)	28 (58.3%)		88
Skills In:	84	4 (4.7%	75 (89.2%)	5 (5.9%)	28 (33.3%)	40 (47.6%)	16 (19.0%)	76

*COHI - Crippled and Other Health Impaired

The overall elements examined were as follows: general acceptance of the substance (knowledge and skills) of the program, positive self-evaluation in terms of competency to enter the field as a practioner, and ambiguities in responses that could be interpreted as weaknesses either in the substance of the program or the quality/quantity of student field work. The responses to the two reactionnaires were compared to determine if any basic differences appeared in the reactions of the two groups.

Examination of COHI Students Responses to Reactionnaires:

Students ratings of "importance" of the program's content ranged from 98.3 percent to a low of 89.2 percent. Although the index of importance was considered highly acceptable, the percentage figures were examined to establish the substantive areas receiving the lowest ratings. These areas and their rating of importance were as follows: Knowledge of Guidance (87.5%), Knowledge of Professionalism (91.6%) and Skills in Professionalism (89.2%). In addition, these three areas received higher "Don't Know" percentages (7.2, 6.2, 5.9 respectively), than negative response percentages. It would appear that "Don't Know" reactions indicate uncertainty of the content's value. This factor coupled with the lower importance ratings for guidance and professionalism competencies suggests that the COHI students regarded these two areas as less germane to their specialization than were the other competencies.

A less positive picture was presented by the data based on student self-evaluation of their preparedness. Positive reactions ranged from a low of 47.6 percent to a high of 80 percent. Negative reactions had a spread of 20 to 49.4 percent; the "Don't Know" reactions ranged from 2.9 to 19 percent. A comparison of the responses in the first two (assessment of the program's content and student self-evaluation of prepardness) columns of the reactionnaire showed higher negative reactions in the student self-evaluations and "Don't Know" categories. This result might reflect the student's apprehensions about assuming teaching responsibilities.

The structure of the COHI reactionnaire required student response to both knowledge and skill in each competency. Inspection of these paired percentages show close correspondence between the two items (knowledge of and skills in) of the first three competencies--Foundations, Assessment of Learner Characteristics, and Behavior Management. Since the difference between the two (knowledge and skills) did not exceed 2.1 percent with the slightly higher rating occurring in the skills of the competencies (see Table I), it may be assumed that the COHI students felt they could translate whatever theory they had acquired in cours work into classroom practice.

This specific pattern of correspondence between theory (foundation of) and skills was not found in the paired reactions to the last three competencies--Instruction, Guidance and Professionalism. In these instances, large percentage differences (11.8, 15.2, 10.7

respectively) were found between the knowledge/skill pairs, with the higher scores of self-evaluation for the theory (knowledge of) component of the competency. The students' perceptions of their attainment suggest that they acquired more theory than practice. These perceptions may be realistic since student field placements apparently did not provide adequate opportunity to sharpen all of the skills intrinsic in the theory of the competencies in question. Another interpretation is also plausible: the students had reported less positive reactions to the importance of the substance of these three competencies which may then have been reflected in their diminished self-confidence in their ability to practice the relevant classroom skills.

Since this instrument is a "reactionnaire" and of necessity subjective, the overall heightened negativity and uncertainty of preparedness ("Don't Know" responses) contained in the student self-evaluation reactions may be interpreted as realistic and natural anxiety having little bearing on their ultimate performance as teachers. None of the student trainees had worked as teachers previously, and none could know with certainty how well he/she would perform.

The data in Column 3 of the reactionnaire (source of most exposure to each competency) illustrate that between 63.6 and 93.1 percent felt their competence was acquired through the Teachers College program. Again the lowest percentages were generated for

Guidance, Knowledge (78.7%) and Skills (63.6%); and for Skills in Professionalism (75.8%). These two competency areas are the ones for which the COHI students had previously demonstrated most uncertainty. A factor that probably explains the percentages of exposure from sources other than Teachers College was the students' previous educational backgrounds. Twenty-five percent of the COHI trainees had either majored or minored in elementary or secondary education at the undergraduate level. In addition, one of the considerations for admission to the program was the candidates previous volunteer work with exceptional children. Considering the factors or prior education and volunteer work experience, the percentage range of Teachers College as a source of exposure was regarded as satisfactory.

Examination of ED Students' Responses to Reactionnaire:

ED student's rating of importance of the program's competencies ranged from a high of 99.2 to a low of 76.15 percent. The percentages were examined to establish substantive areas receiving the lowest ratings. Ratings in these areas were as follows: Knowledge of Foundations, 76.2 percent; Knowledge of Assessment Procedures, 78.8 percent; Knowledge of Teacher as Professional Agent of Change, 86.9 percent. These three competencies also received higher negative (19.2, 18.2 and 8 percent) than "Don't Know" ratings. The heightened "importance" evaluation of what was essentially the theory component of the competencies coupled with high ratings in the skills

component (Skills in Assessment Procedures, 99.2%; Skills in Teacher as Professional Agent of Change, 98.6%; and Skills in Teacher as a Classroom Strategist, 99.2%) suggest that the ED masters students perceived skills as more important to their success as educators than knowledge or theory.

Data based on student evaluation of how well prepared they felt they were to assume teaching positions were less positive. Positive reactions ranged from a low of 49.5 to a high of 93.2 percent. The negative reaction percentages ranged from 15.4 to 44.4 percent; the "Don't Know" reactions had a spread of 1.4 to 9.1 percent.

The ED reactionnaire listed four competencies, two of which (Assessment Procedures and Teacher as Professional Agent of Change) were subdivided into knowledge and skills in practicing the competency. A comparison of perceived importance (Table II, Section 1) of Knowledge and Skills in Assessment and Teacher as Professional Agent of Change demonstrated more positive reactions to the skills in those areas than to the knowledge in them. The skill/knowledge difference for the competency of Assessment Procedures was 13.4 percent, difference Teacher of Professional Agent of Change was 11.7 percent. The same pattern was found in the students' evaluation of the other two competencies. The Knowledge of Foundations was deemed to be important with approval at 76.15 percent, whereas student approval for the competency of Teacher as Classroom Strategist (Skills) was 99.2 percent.

Students' self-evaluation of competencies acquired (Table II, Column 2) demonstrated the same tendency to devaluate theory (knowledge) and to appreciate skill acquisition.

TABLE II

PERCEPTIONS OF ED* STUDENTS ON IMPORTANCE OF AND THEIR ACQUISITION OF COMPETENCIES

		1. Importance of Competencies			2. Self-Evaluation in Competency Acquisition			Percent Acquiring Competency at Teachers College
	Number of Responses	Negative	Positive	Don't Know	Negative	Positive	Don't Know	
Foundations Knowledge Of:	130	25(19.2%)	99(76.15%)	6(4.6%)	44(33.8%)	79(60.8%)	7(5.3%)	76.8
Assessment Procedures Knowledge Of:	33	6(18.2%)	26(78.8%)	1(3.0%)	10(30.3%)	20(60.6%)	3(9.1%)	94.6
Skills In:	154	6(3.8%)	142(92.2%)	6(3.8%)	25(16.2%)	123(79.9%)	6(3.5%)	92.3
Teacher as Pro/Agent Knowledge Of:	99	8(8.0%)	86(86.5%)	5(5.1%)	44(44.4%)	49(49.5%)	6(3.9%)	34.1
Skills In:	143	2(1.4%)	141(98.6%)		41(28.7%)	99(69.2%)	3(2.1%)	85
Teacher as Classroom-Strategist Skills In:	220	1(.8%)	119(99.2%)		34(15.4%)	183(83.2%)	3(1.4%)	85.4

*Emotionally Disturbed

For example, the difference between the paired responses (knowledge and skills) in Assessment was 19.3 percent. This percent difference was 5.9 higher than the Knowledge/Skill difference in Assessment of the importance of the same competence. A difference of 19.7 percent in student self-evaluation was found between knowledge and skill as a Professional Agent of Change, a rise of 6.1 percentage points. The data suggest that the value students placed on the content of the program was a variable in their evaluation of their state of preparedness.

The data in Column 3 of the reactionnaire show that between 76.8 and 94.6 percent of the ED students felt that they gained their competence through Teachers College. Unlike the COHI data there appeared to be no correspondence between the lowest percentage points of the "source of exposure" (Column 3) and the competency percentages (Column 2) which demonstrated student doubt and uncertainty. The percentages of exposure from sources other than Teachers College might be a factor of the students' previous educational backgrounds. Eighteen percent of the ED trainees had either majored or minored in elementary or secondary education at the undergraduate level. In addition, one of the considerations used in selection for the program was the amount of previous volunteer work students had done with exceptional children. Considering the factors of prior education and volunteer work experience, the percentage range of Teachers College as a source of exposure was regarded as satisfactory.

Comparison of the Two Preservice Training Groups--COHI and ED

The data from the preservice trainee responses to the COHI and ED

Reactionnaires indicate that the two student populations may not be constituents of a single group but may be more representative of two different training groups. A comparison of Table I (COHI Responses) with Table II (ED Responses) suggests that the COHI students were more certain of the relationship of the competencies to the success of educators (positive response range: 87.5 - 98.3 percent) than were the ED students (range: 76.1 - 99.2 percent). COHI students appeared to value the theory component of the competencies as much as the skills component of the same competencies whereas ED students whenever possible gave higher importance ratings to skills than theory.

In addition, the COHI students appeared far less confident of their level of preparedness to enter their field of specialization than did the ED students. These differences were reflected not so much in the ranges of the positive responses as in the ranges of the "Don't Know" column. The COHI responses ranged from 2.9 to 19.0 percent while the ED range was 1.4 to 9.1 percent. Furthermore as was pointed out previously, an examination of the paired responses (knowledge and skills) revealed COHI reaction patterns that were antithetical to ED students' patterns. In general, COHI students' responses reflected a feeling of greater preparedness in theory than in skills. The reverse pattern was revealed in ED students responses. One possible interpretation of this phenomenon is that this particular COHI group were somewhat more apprehensive than the ED group. It might also have been a function of the more lengthy reactionnaire administered to this group. The third interpretation is based on the nature of the Taxonomy of Instructional Treatment that was

designed by Dr. Abraham Tannenbaum of Teachers College, Columbia University as a vehicle for individualizing and personalizing instruction for socially madadjusted, emotionally disturbed pupils. It is believed by educators adept in the use of the Taxonomy, that it is an effective tool for preservice training in all areas of exceptionality. But in reality, practically all of the field experience in the use of the Taxonomy has come from the exceptionality of emotional disturbance and social maladjustment. Therefore, this exceptionality provided the basic matrix in which the theory and practices of the Taxonomy were presented to the preservice trainees. Even though applications of the Taxonomy were made to the specialization of COHI, these students may have viewed the Taxonomy as being more peripheral to their physical management needs than to those of ED students. These interpretations are reviewed and discussed in a subsequent chapter of this report on recommendations for future cross-categorical training programs.

2. Homebound Teachers' Evaluation of Masters Degree Students

Opinions of the homebound teachers were gathered through individual conferences in which broad perceptions of masters degree student effort, academic effect and social affect on the homebound children were elicited. This informal format was selected because the tutorial schedules of Homebound Teachers and masters degree students did not coincide after the introductory phase of the program, during which time the homebound children, their parents and the graduate students became acquainted with each other. Thus Homebound Teachers had no first-hand experiences upon which to draw their evaluations. Homebound Teachers' perceptions about the trainees on the education of homebound children came from the

secondary sources of what the children and parents said about the trainees and what academic and social progress--progress beyond their own efforts--was evident in the childrens' behavior.

The Homebound Teachers had only positive reactions to the masters students. To a person, the masters students were viewed as effective, both academically and socially, as educators and were seen as supportive of the inservice teachers' purposes and as extensions of the teachers themselves.

3. Examination of Instructional Assistants' Evaluations of Master Degree Students and Training Program

The Reactionnaire (see Appendix H) that were completed by Instructional Assistants' (IA's) (the same form completed by COHI students) evaluated six competencies dealing in knowledge of and skills in each. The Reactionnaire included the following competencies: Foundations, Assessment of Learner Characteristics, Behavior Management Instruction, Guidance and Professionalism. The continuum of IAs' appraisal of the importance of the competencies to the success of special education teachers was as follows: a) very important, b) fairly important, c) fairly unimportant, d) unimportant, e) don't know.

The second step in completing the Reactionnaire required that Instructional Assistants evaluate each student's preparedness in each of the competencies. The rating continuum comprised: 1) very adequate, 2) fairly adequate, 3) fairly inadequate, 4) inadequate, 5) don't know,

In tabulating the data, Instructional Assistants' reactions to the questions on program value and student preparedness were assigned to one of three categories: positive reactions, negative reactions and

reactions open to interpretation. Therefore, in assessment of importance, a) and b) were regarded as positive responses; c) and d) as negative; and e) as responses open to interpretation. In the evaluation of student's knowledge or skills responses in 1) and 2) columns were treated as positive; 3) and 4) as negative; 5) as responses open to interpretation.

The results of the tabulation and analysis of the data are presented in Table III (Instructional Assistants' Responses on Practicum Supervisor's Reactionnaire). The range of IA's importance rating for program competencies ranged from 100 percent for the knowledge of and skills in the competency of assessment of Learners characteristics to 80 percent for competence in the knowledge of Guidance. The lowest "importance" ratings by the IAs were given to the students' knowledge of Guidance and skills in Professionalism. A comparison of COHI student responses to their reactionnaires in these two areas (Guidance and Professionalism) and IQ responses indicate strong correspondence. It would appear that both COHI students and the Instructional Assistants regarded knowledge of Guidance and skills in Professionalism as moderately relevant to the education of COHI teachers.

Agreement of this type was not found in a comparison of ED student responses with IA responses primarily because the ED reactionnaire did not include the two competencies of Guidance and Professionalism. In addition, as was noted previously ED student appraisement was lower for competency theory (knowledge) than for competency skills, a phenomenon that was not demonstrated by the reactionnaire responses of COHI students of IAs.

TABLE III

INSTRUCTION ASSISTANTS' RESPONSES TO PRACTICUM SUPERVISOR'S REACTIONNAIRE

	1. Importance of Competencies			2. Self-Evaluation in Competency Acquisition		
	POSITIVE	NEGATIVE	DON'T KNOW	POSITIVE	NEGATIVE	DON'T KNOW
Foundations Knowledge Of:	95.5%	4.5%		33.3%	17.7%	48.8%
Skills In:	90.0%	7.7%	2.2%	57.0%	21.0%	21.0%
Assessment of Learner Characterists Knowledge Of:	100.0%			64.0%	21.0%	14.0%
Skills In:	97.7%	2.3%		68.1%	17.0%	14.8%
Behavior Management Knowledge Of:	96.6%	2.4%		70.0%	3.3%	26.6%
Skills In:	98.6%	1.4%		62.6%	72.0%	25.0%
Guidance Knowledge Of:	80.0%	15.8%	4.1%	45.8%	35.8%	18.3%
Skills In:	97.3%	2.7%		58.6%	6.6%	34.6%
Professionalism Knowledge Of:	95.0%	5.0%		48.3%	36.6%	15.0%
Skills In:	85.7%	14.2%		29.5%	25.7%	44.7%
Instruction Knowledge Of:	86.6%	3.4%		65.0%	22.6%	12.0%
Skills In:	86.6%	10.7%	2.6%	68.0%	18.6%	13.3%

IA "importance" ratings of both knowledge and skills related to instruction was 86.6 percent. Further examination of the data on this competency area emphasized that a bias was explicit in the IA's responses engendered by their reactions to a specific element of the competency, i.e. the Taxonomy of Instructional Treatment, the tool by which the trainees learned how to individualize and personalize instruction for pupils. Twelve percent of the IA's negative reactions to knowledge of instruction was related to the Taxonomy.

The paired "importance" ratings for guidance competency (i.e. knowledge of and skills in) were compared. Positive regard for knowledge of guidance was 80 percent, for skills in guidance 97.3 percent--a difference of 17.3 percent. To a lesser extent, (10.8%) this disparity was exhibited in the COHI student reactions. The presence of these differences in the paired responses of both IA and COHI student reactionnaires was interpreted as further confirmation that guidance theory was regarded as less relevant to the success of teachers of special education than was for guidance skills.

IA's evaluation of students' knowledge and skills (see Appendix H) varied greatly: positive IA responses ranged from 29.5 percent to 68.1 percent, negative responses from 6.6 percent to 35.8 percent; and the range for "Don't Know" was 12 percent to 48.8 percent. This wide range of "Don't Know" responses differed markedly from that for the estimated "importance" of the competencies wherein the range was between 2.2 percent and 4.1 percent.

The Practicum Superviser's Reactionnaire (see Appendix H)

consonant with the COHI reactionnaire but not with the ED instrument. A comparison of these two forms (see Appendix H) shows that the Practicum Supervisor's Reactionnaire contained two competencies (Guidance and Professionalism--Knowledge of and Skills in) that were not in the ED reactionnaire. These omissions probably necessitated frequent use of the "Don't Know" evaluation. An equally important cause for the frequent use of "Don't Know" the forced evaluation of the ED trainees on content and skills that were not part of their program. Since no aternative response was available, the IAs used the "Don't Know" category in these cases, thereby depressing the overall IA approval level of student accomplishment.

Other factors to be considered in explanation of the high "Don't Know" reactions and the correlatively low approval reactions are the following:

-Student Field Placements--the specific field placement may not have offered students sufficient opportunities to practice skills in and demonstrate knowledge of some competencies.

-Frequency of Opportunity to Evaluate--considering the number of competencies included in the Reactionnaires, the frequency of the IA's observations and evaluations of the students practicing the competency skills was limited.

-Reactionnaire Realism--it may not have been realistic to include some of the highly complex skills in the evaluation of masters degree students.

4. Graduate Questionnaire

The graduate questionnaire (see Appendix I) was completed by both COHI

ED masters students one year after leaving this cross-categorical training program. They expressed their perceptions of the value of the program and their degree of professional preparedness after having the year's experience in the field. Information on type of position, educational level, type of placement and setting appears in Table IV; 95 percent of the graduates obtained employment, 90 percent in special education and 10 percent in regular education.

The former trainees evaluated their on-the-job performance as well as the Teachers College program through which they received preparation for their present positions. The graduate questionnaire (see Appendix I) included two four point scales; the first ranged from inadequate to superior for their self-evaluation of on-the-job performance; the second from inferior to superior for their evaluation of this Teachers College program. The questionnaire data suggests general satisfaction with on-the-job performance: 50 percent of the graduates perceived themselves as performing at a superior level; 44.4 percent as very adequately; 5 percent as adequately. No one reported inadequate functioning. The graduates also saw their Teachers College cross-categorical training program as adequate with their responses equally divided among the superior, very adequate and adequate categories.

The disparity between students positive self-evaluation of competencies attained immediately after the training program (63%) and after a year of in-the-field experience (99%) suggests several vitiating factors prior to actual teaching: self-doubts, anxiety about job opportunities and job requirements and lack of realism about job expectations as well as misinterpretation of the reactionnaire items.

TABLE IV

EMPLOYMENT STATUS OF MA STUDENTS ONE*

YEAR AFTER PROGRAM COMPLETION
(POSITION, LEVEL, TYPE AND SETTING)

Position	Number of Graduates	Type of Placement		Level		Setting	
Regular Teacher	3	Public School	19	Pre-school	--	Urban	10
Special Class Teacher	17	College	3	Elementary	13	Suburban	10
College Teacher/Administrator	3	Clinic/Hospital	4	Secondary	6	Rural	5
Resource Room Teacher	6	Residential	3	Post-secondary	--	Residential	7
Other	3	Special Day School	3	Combined	13		

*1971-72, 1972-73

Total number of graduates employed	30
Total number of graduates employed in special education	27
Total number of graduates employed in regular education	3

An even larger disparity existed between the positive graduate responses (99%) and those of the IA's (55.8%). It is possible that some distortion occurred from the IA's use with ED students of the reactionnaire designed for COHI students; the ED focus of the Taxonomy of Instructional Treatment--the vehicle by means of which the students were to individualize and personalize instruction for the homebound population; insufficient opportunity to evaluate students' practicing competency skills; unrealistic expectations of the students about to enter their professional fields.

Component 2 - REEDUCATION OF HOMEBOUND TEACHERS

The translation of a written plan to actuality is a complex task particularly if the proposal is a collaborative effort with another institution. Such was the case with this project as Teachers College worked with the Bureau of Education of the Physically Handicapped of the New York City Board of Education through which homebound children, either crippled and other health impaired or socially maladjusted, emotionally disturbed, are served.

The major modification of the proposed training program was essentially a shift in priority of effort. While reeducation of homebound teachers, Component 2 of the project, was retained, and unstinting effort was directed toward achieving this outcome through cross-categorical training and taxonomic treatment. However, collection of objective evaluative data on this inservice component was discontinued in favor of data from individual conferences with the inservice teachers, masters degree students and instructional assistants.

The decision was precipitated by a change in the original procedure for

selecting the homebound teachers. For a number of reasons, the Bureau for the Education of the Physically Handicapped selected the inservice teachers without participation by the college staff. The Bureau's supervisor's major criteria for selection appeared to be the teachers' abilities to handle difficult children and stressful situations. Little attention was paid to characteristics of flexibility, ego strength, desire for self-improvement and change that seemed necessary for effective inservice training. Another dominant force in the realignment of the project priorities was the United Federation of Teachers' (UFT) relating to the use of teacher time and remuneration had to be met. Adding to the complexity of this multi-bureaucratic effort was the introduction of inexperience graduate students to a learning situation in which differing sets of roles and functions had to be applied because the students were responsible to two parties--the teachers in the field and the university in which they were matriculated. In a sense, the situation required divided loyalty which tended to elevate the students' tension level and obfuscate their perceptions of the training program's goals. Whenever a university takes the initiative in designing a training program with intense involvement of public school teachers there are difficulties. Traditionally teachers seem to feel uncomfortable with university faculty and often have problems with role and function definitions. The program being evaluated was no exception.

In most training programs it is necessary to work out appropriate strategies for the supervision of the trainees and for clarification of the responsibility of the cooperating teachers to the university. In this instance the problem was intensified because the Homebound Teachers were a part of the inservice effort with the program introducing them to the Taxonomic approaches as applied to the

education of handicapped children. Therefore, although experienced, the teachers were perceived by the master degree students as less skilled than the training staff and without doubt, experienced difficulties as they assumed the role of learners among the trainees (the preservice participants). Depending upon their self concept and their personality characteristics this relationship resulted in some defensiveness and reduced cooperation. The small stipend the teachers received for participation in the program was a positive influence on some of them. For some, there was the factor of the prestige in their involvement with the university.

In spite of the above factors, most of the inservice teachers felt the experience was a worthwhile one.

Reactions of Homebound Teachers:

Among the expressed Homebound Teachers' perceptions were the following: a genuine respect for the abilities of the Teachers College personnel; high regard for the preservice participants believing them to be capable and cooperative; recognition of benefits derived from contact with many new ideas regarding their population; valuable exposure to research studies, curricula materials and technology. The Taxonomy, one of the central aspects of the program, appeared to evoke the most diverse perception of the inservice group. Some were able to demonstrate knowledge regarding the Taxonomy while others expressed some degree of hostility toward it. Some found the Taxonomy exciting and others found little help in it. Many of the Homebound Teachers felt they had not been utilized fully by the program; others were quite content to have as little additional responsibility as possible. From observation and interview the project's external evaluator attributed much of this divergence to the group's wide range of intellectual

capacity, personal commitment, and teaching ability.

Most of the preservice participants found the inservice teachers to be supportive, allowing for a lot of freedom and yet providing them with much useful experience. The graduate students also felt that the inservice teachers brought to the program a great deal of insight into the nature of the bureaucracy that is the New York City School System, into the laws regulating the lives of handicapped children within the system, and into the nature of the population itself with a great deal of knowledge concerning the instructional needs of the children.

The project's evaluator reported that the inservice component of the program was not as strong as it might have been. As an objective it was a secondary priority of the training staff for reasons mentioned previously. It sometimes appeared that the teachers were victims instead of willing learners. Yet this is too often the case with inservice training. This is one area of teacher education that concerns the professional and yet an area where solutions to the problem are not as yet dynamic, given all the factors of teacher responsibilities, income, union membership, self needs and other considerations of like order.

When the training staff believed that the inservice aspect of the program was having difficulties, they offered the Homebound Teachers the option of remaining with the program or of leaving it. No one left. Some told the evaluator that the resources of the Taxonomy heightened their awareness of the variables that can be utilized in the instruction of the homebound population. Although the inservice teachers found the content of the Taxonomy generally interesting, they favored more additional specific inputs narrowly related to their own concerns. In retrospect, they wanted more "quick-help" kind of sessions, although many said

that they had recieved considerable practical help. Therefore, although they would have kept the Taxonomy as a central feature they wanted more of their own needs treated as part of the curriculum. Also, some felt that the program provided them with insights into the creative uses of different media which could be used with the children. They also appreciated instruction in ways of making low cost film strips and overheads. Also, some stated that their contact with the preservice students forced them to do added research on their own and strengthened their awarness of what they were doing with the children. As professionals they felt they had been exposed to alternatives which could help them meet the child's needs for re-entry into the main school system. Many valued their exposure to the facilities of Teachers College and to the available professional resources.

Component 3 - INVESTIGATION OF THE DIVERSITY OF HOMEBOUND PUPIL POPULATION

The study of diversity of the homebound population revealed that the three groups of children (emotionally disturbed, physically handicapped and acute or chronic impairment) were statistically homogeneous in chronological age, IQ socio-economic status, race and length of time spent on home instruction. The relationships between the children's locus of control and various characteristics were studied through six specific research questions.

Research Question One

Is there a significant difference in the scores earned on the children's Internal-External Control Scale (CIE) by homebound children who have different medical classifications (emotionally disturbed, physically handicapped and health impaired)?

There were no significant differences among the groups. Because there were relatively few health impaired subjects and because this group had the highest variance, emotionally disturbed youngsters receiving home instruction were compared with those who were physically handicapped: the result was not significant. In summary, there appeared to be no differences in the locus of control scores of different disability groups.

Research Question Two

Is there a readily identifiable underlying pattern of responses which might suggest a multi-dimensional interpretation of locus of control as it applies to children on home instruction?

A factor analysis was carried out to investigate the possible presence of a pattern of relationships underlying the responses of homebound children to locus of control test items. The 23 CIE items were subjected to principal component analysis. Two factors were extracted from the correlation matrix and the factor matrix was then subjected to varimax rotation.

Factor I, related to perceptions of luck, accounted for 66 percent of the extracted variance, while Factor II, related to perceptions of powerful others, accounted for 34 percent.

Factor I--Luck: Table V shows the 11 items loading on Factor I arranged in descending order. The items in this factor paired the endorsement of achievement as a direct result of the individual's effort with the notion of unpredictability in the environment. It was noted that items with the highest loadings on Factor I were primarily related to the subjects' perceptions about the influence of luck on control of the school/peer environment.

Using only those items with factor loadings greater than .40, disability groups were compared to determine whether there was a significant difference in the way in which they selected alternatives on Factor I.

TABLE V

FACTOR I -- BELIEF IN LUCK: ITEMS AND

FACTOR LOADINGS ON THE CIE

	Question	Factor I	Factor II
18a.	Unless you're lucky you cannot get kids to do what you want.		
b.	Getting kids to do the right things depends upon ability; luck has little or nothing to do with it.	.73	.04
14a.	Who gets to lead the class often depends on who was lucky enough to be in the right place first.		
b.	Who gets to lead the class depends on who has the most ability; luck has little or nothing to do with it.	.61	.25
19a.	Sometimes I can't understand how teachers arrive at the grades they give.		
b.	The grades I get depend upon how hard I study.	.59	-.03
5a.	Unless you are lucky, you cannot be a good leader.		
b.	Anyone can be a leader if he tries.	.51	-.04
26a.	Kids who don't do well in school often work hard but they just seem to have bad luck.		
b.	If kids don't do well in school it's their own fault.	.48	.09
21a.	Many times I feel that I have nothing to do with things that happen to me.		
b.	I do not believe that chance or luck has anything to do with what happens to me.	.48	-.31
15a.	Most kids don't realize how much of what happens to them depends on luck.		
b.	There really is no such things as luck.	.38	-.01
12a.	People who have friends are very lucky.		
b.	A person who tries, makes new friends.	.31	-.31
10a.	Any student can help change what happens in school.		
b.	This school is run by a few kids; there is not much I can do about it.	.27	-.13
7a.	Most of the time I have found that what is going to happen will happen.		
b.	I always try to plan ahead--I don't depend on luck.	.21	-.01
3a.	Most of the time children get the respect they deserve from others.		
b.	Many times a child can try hard and no one will pay attention to him.	-.17	.03

TABLE VI

FACTOR II -- POWERFUL OTHERS: ITEMS AND FACTOR LOADINGS ON THE CIE

	Question	Factor I	Factor II
13a.	For me, getting what I want has little or nothing to do with luck.		
b.	Many times we might just as well decide what to do by flipping a coin.	.16	.48
9a.	Doing well in school is a matter of hard work; luck has little or nothing to do with it.		
b.	Doing well in school depends on studying the right thing at the right time.	.00	.46
22a.	Children are lonely because they don't try to be friendly.		
b.	There is not much use in trying too hard to make friends; if people like you, they like you.	-.10	.41
24a.	Knowing the right kids is important in doing well in school.		
b.	You can do well in school if you have the ability and do a good job.	.24	-.38
11a.	When I make plans I am almost sure that I can make them work.		
b.	It is not too good to plan too far ahead because many things turn out to be a matter of good or bad luck anyhow.	.05	.33
2a.	Many of the unhappy things that happen to me are not my fault.		
b.	Unhappy things often happen to me because of the mistakes I make.	.21	-.23
23a.	What happens to me is my own doing.		
b.	Sometimes I feel that I do not have enough control over what happens to me.	-.02	.19
25a.	The teacher usually chooses kids for class leaders who deserve being chosen.		
b.	It is hard to know why some kids get chosen to be class leader with their ability.	.13	.18
6a.	Usually other people choose me for a friend.		
b.	Usually I choose my own friends.	.11	-.15
17a.	It is hard to know whether or not a person really likes you.		
b.	How many friends you have depends upon how nice you are.	.07	-.14
4a.	Most of the time teachers are fair to students.		
b.	Teachers will often change a student's grade because of little things that happen.	.02	.13
8a.	If you study you will do well on a test.		
b.	People who score the highest on a test are lucky.	.00	.09

No differences were indicated among the groups.

Factor II--Powerful Others: The 12 items which loaded on Factor II are shown in Table VI. In general, the items in this factor paired the individual's actions with the actions of significant others. Using selected items with factor loads above .37, Factor II scores were computed for each subject. The disability groups were compared to determine whether there was a significant difference in the way they selected alternatives. Analysis of the data failed to produce significant differences in Factor II scores. Since the small number of subjects in the health inpaired group may have been distorting the analysis, Factor II scores of the emotionally disturbed and physically handicapped were compared without this possible source of distortion. Factor II scores of the emotionally disturbed and physically handicapped were found to be significantly different.

In order to examine further the relationship between Factor II scores and medical classification, a median split was used to locate the cut-off scores of the contrasting internal and external groups. It was possible for subjects to achieve a score of 0 to 3 on the Factor II dimension. Subjects with scores of 1 or below were defined as "externals;" those with scores of 2 and above as "internals." A greater proportion of emotionally disturbed subjects were defined as external, while a greater proportion of physically handicapped were defined as internal on this set of items.

In summary, there appeared to be two factors underlying the locus of control responses given by the sample of homebound children. While Factor I (Luck) was perceived equally by emotionally disturbed, physically handicapped, and health impaired subjects, Factor II (Powerful Others) was not. Emotionally disturbed subjects were more likely to choose alternatives supporting the power and influence of others in the environment than were subjects in the other groups.

In contrast, physically handicapped and other health impaired subjects seemed more likely to choose alternatives related to the actions of the individual.

Research Question Three

In the homebound population, how is locus of control related to chronological and mental age?

For the group as a whole, locus of control scores were significantly related to chronological age but not to mental age. While the same relationship existed for those subjects in the sample who were physically handicapped, this was not the case for the other two sub-groups. For the emotionally disturbed subjects, there was no significant relationship with either chronological or mental age. For the health impaired subjects, locus of control scores correlated equally well with both chronological and mental age but achieved statistical significance at only the .10 level.

Research Question Four

Is there a significant correlation between locus of control scores and length of time on home instruction?

For the total sample the correlation coefficient achieved was too low to support a conclusion of significant relationship between locus of control scores and the length of time the subject had been on home instruction. However, for the physically handicapped group, the correlation coefficient was high enough to support the hypothesis that for this sub-group there was a significant positive relationship ($p. < .05$) between CIE scores and the length of time that the subject had been receiving home instruction.

Research Question Five

Question Five was concerned with the relationship between locus of control

and the academic achievement levels of homebound students. For the purpose of analyzing the data the total sample was divided into halves. Externals were defined as those children scoring 13 and below on the CIE. Subjects scoring 14 and above were defined as internals. Internals and externals were compared with respect to the relationship between IQ and achievement levels as well as with respect to achievement gains made during the academic year.

Before testing the relationship between IQ and achievement, it was necessary to examine the differences between internals and externals on each of the variables to be correlated.

.Locus of Control and Achievement Levels:

Do internals and externals show a significant difference with respect to the relationship between expected and actual achievement?

Coefficients of correlation between IQ and earned standard scores on the WRAT were calculated for internal and external subjects. For the whole sample (n = 81), achievement scores in reading, spelling and arithmetic correlated significantly with IQ at the .01 level. Correlation coefficients were then compared for significance of difference between internal and external subjects. The degree of the relationship between IQ and academic achievement was not found to be different for the internal and external subjects.

.Locus of Control and Achievement Gain:

Are academic achievement gains related to whether the child has been defined as internal or external?

External subjects showed significantly greater improvement in reading than did internal subjects. For both spelling and arithmetic the differences in the mean gain made by internals and externals appeared not to be signifcant.

Research Question Six

Is the type of educational/therapeutic setting to which the homebound child is referred at the end of the academic year related to whether the child has been defined as internal or external?

At the end of the academic year, 36 children remained on home instruction; 27 were referred to special class placement; and an additional 12 children were referred to a regular class or street academy. Of the remaining six children who were part of the initial sample, four were graduated and two moved out of New York City.

A greater than expected number of internals were referred to regular programs, while a fewer than expected number of externals were similarly referred. Further statistical comparisons of those subjects retained on home instruction and those referred to special or regular class settings indicated a significant difference ($p. < .001$) when subjects were grouped by medical classification. A greater number of emotionally disturbed were retained on home instruction than would have been statistically expected. Likewise, fewer than expected emotionally disturbed subjects were referred to class settings.

In summary the data obtained from the study of the diversity of homebound children were analyzed to examine the strength and direction of the relationships between locus of control and a variety of characteristics of children receiving home instruction. There appeared to be no differences in the locus of control perceptions of emotionally disturbed, physically handicapped, and health impaired subjects. Also, for homebound subjects, regardless of disability, locus of control was more strongly positively related to chronological age than to mental age. Length of time the subject had been on home instruction was significantly

positively related to internal beliefs in locus of control for physically handicapped subjects only.

A factor analysis indicated two factors underlying CIE responses. Factor I was related to perceptions of luck and Factor II was related to perception of powerful others. While the different disability groups showed no differences on Factor I, there was a significant difference in Factor II scores. Emotionally disturbed subjects showed greater externality than did crippled or other health impaired subjects.

There were no mean differences between internals and externals on either IQ or achievement. Achievement scores correlated significantly with IQ. However, the degree of the relationship was not significantly different for internals and externals. In comparing internal and external subjects, differences in mean achievement gain scores were significant for reading only; greater gains were shown by externals.

Component 4 - REINTEGRATION OF HOMEBOUND CHILDREN

The data on reintegration of homebound children into other educational facilities was generated by Baken's study. At the end of the academic year, 36 children remained on home instruction, 27 were referred to special class placement; and an additional 12 children were referred to a regular class or street academy. Of the remaining six children who were part of the initial sample, four were graduated and two moved out of New York City.

There was a significant difference ($p. < .001$) between those subjects retained on home instruction and those referred to special or regular class settings, when subjects were grouped by medical classification as shown in Table VII a greater number of emotionally disturbed pupils were retained on home instruction than would have been statistically expected.

TABLE VII

X^2 ANALYSIS COMPARING MEDICAL CLASSIFICATION AND SCHOOL PLACEMENT AT THE END OF THE ACADEMIC YEAR

	Emotionally Disturbed	Physically Handicapped	Health Impaired	Total
Retained on Home Instruction	27 (17.28)	6 (12.96)	3 (5.76)	36
Referred to Regular or Special Class	9 (18.72)	21 (14.14)	9 (6.24)	39
TOTAL	36	27	12	75

(Expected frequencies in parentheses)

$X^2 = 20.25$

$X^2_{(2;\ .001)}$ 13.82

Likewise, a fewer than expected number of emotionally disturbed subjects were referred to class settings.

Retention of subjects on home instruction appeared to be related to only one variable--nature of disability. Seventy-eight percent of the physically disabled and 75 percent of the acute and chronic health impaired were referred to school programs, while only 25 percent of the emotionally disturbed subjects were similarly referred.

Chapter IV

Recommendations and Implications

This concluding Chapter is divided into three parts. The first proposes specific recommendations relating to the four primary purposes (Components) training of the program listed on page 5-8. The recommendations regarding Components 1 (Cross-Categorical Training of Master Degree Candidates) and 2 (Reeducation of Homebound Teachers) are directly based on input from all participants in the project (staff, preservice and inservice trainees) and are the most relevant to future attempts in the development of teacher training programs for pre and inservice educators. Recommendations concerning Components 3 (Investigation of the Diversity of the Homebound Pupil Population) and 4 (The Reintegration of Homebound Children) are derived primarily from the results of the Baken study, done in conjunction with this project, and have implications for the development of psycho-educational intervention programs serving homebound populations.

The second and third parts of this Chapter outline some of the major strengths and problems encountered in the administration of this project, that may have affected the attainment of the goals and objectives listed earlier (page 13). Alternative approaches are also suggested.

Component 1 - CROSS-CATEGORICAL TRAINING OF MASTER DEGREE CANDIDATES

Recommendations

The following recommendations for future training programs of this type emerged from the data and were formulated within the structure of the first

component of the project i.e. Cross-Categorical Training of Masters Degree Students.

1. Students' Responses to Reactionnaires

Attention was addressed to the following problems: selection of students for cross-categorical training, orientation of students to the program, student input to the program's content and the intent and extent of the measuring devises.

a.) Selection of students for cross-categorical training.

Interpretation of the data suggested that COHI students were somewhat more apprehensive about their ability than were ED students. Examination of the program of the two groups suggests that the COHI students had a heavier academic load to carry since the Taxonomy was originally designed for socially maladjusted, emotionally disturbed children and was presented essentially within the framework of that exceptionality. It is recommended, therefore, that students specializing in other exceptionalities be informed of the program's central focus and that ways of presenting the Taxonomy with different foci be developed.

b.) Orientation of students.

Much of the unrealistic student self-evaluations and their unnecessary anxieties about on-the-job performance could probably be reduced by including in the program a series of orientation sessions throughout the year. At the first session, students should be informed more clearly of the competencies that are to be

the base of their training. Throughout the year, these sessions attended by the program directors and project staff as well as the students should concentrate on defining, refining and interpreting the competencies. There should be, in addition, quarterly evaluations of training and self-evaluation. In this way, adjustments could be made to strengthen competencies being neglected and students would be provided with an arena in which to air their self-doubtes and apprehensions.

c.) Student input.

The recommended on-going discourse about the competencies should result in refinement of the measurement devices used to evaluate the program's effectiveness and the students' preparedness. These devices would then be practical in terms of the competencies to be included in the suggested quarterly evaluations. Time and effort should be directed specifically toward professional competencies that novices should anticipate and be expected to cope with. To this end, it is suggested the competencies of Guidance and Professionalism, highly sophisticated skills, might be demphasized in the program; the competency skills should stress those the students would have to contend with most frequently in the classroom.

2. Homebound Teachers Evaluation of Masters Students

For more valid evaluation from this source, it would be necessary to schedule more tutorial field practice for homebound children so that homebound teachers could observe the masters student in session with

each assigned child. It is questionable whether the Board of Education would approve such use of its homebound teachers' time. In addition, the supervisors' union (Council of Supervisors and Administrators) would need to be consulted since presently this practice is viewed as an infraction of its regulations.

3. Instructional Assistants' Responses to Reactionnaires.

a.) Selection of instructional assistants.

The data revealed that a number of the instructional assistants were biased against the use of the Taxonomy as the vehicle by which masters students were taught to devise instructional treatment for children; this prejudice was counter-effective to one of the major thrusts of the program. It is suggested, therefore, that the selective process should ascertain the degree to which instructional assistants approve of the programs major components.

b.) Orientation of instructional assistants.

Instructional assistants should not only participate in the orientation sessions suggested for the masters students but a series of special orientations should be designed for them. The purpose of these sessions would be directed toward the honing of supervision and guidance skills. These sessions also should result in refining the measurement devises used by the instructional assistants in evaluating master degree student performance.

Component 2 - REEDUCATION OF HOMEBOUND TEACHERS

Recommendations

With certain positive perceptions of the inservice participants and with the acknowledgment of some of their achievements on the parts of the preservice students, in spite of the difficulties noted, there are specific directions that can be recommended which might avoid problem areas.

1.) Those to be involved as inservice participants in a program of this kind should have initial input into the design of the program itself before their actual involvement.

2.) There should be careful and precise definition of roles and functions especially in the areas of supervision and relationships toward the teacher in the field.

3.) The inservice teachers need an in-depth orientation to the new concepts to be introduced by new program to avoid their feelings of inadequacy in the presence of preservice individuals. They should have in-depth exposure, for example, to the Taxonomy, new research trends, new content issues, legal patterns and the like before they become part of a learner group with the preservice students.

4.) The inservice teachers participants should more actively participate in seminars with preservice students to heighten their professional roles and to provide for much needed input from the field and to break down perceptions of traditional role hierarchy.

5.) More precise screening procedures are required to determine the inservice participants professional excellence, their supervisory capacity, their ability to establish positive interpersonal relationships, their positive

mental health, the nature of their personality fabric and its essential quality of being able to be helpful, non-threatened and non-hostile towards new ideas and towards knowledge itself.

Component 3 - INVESTIGATION OF THE DIVERSITY OF THE HOMEBOUND PUPIL POPULATION

The diversity in the homebound population as illustrated by the presence of three major disability groups receiving home instruction and the analyses of the testing results suggests a number of implications for training programs, instruction and curriculum development (see implications for Component 4).

1. Training Programs: Programs preparing home instruction teachers have traditionally focused on the needs of children with a physical deviation or health problem. As the population receiving home instruction becomes more varied, a training program directed solely toward the education of the CCHI is clearly inappropriate. Thus, this preparation and reeducation project in which cross-categorical training is emphasized is a step in the right direction.

Previous research has shown that learning and situation-specific performance depends upon whether or not the individual perceives that he controls the contingency between behavior and reward. In reviewing the data of this study, internals and externals would appear to have reacted differently to the special tutorial relationship inherent in the homebound situation. Whether the home instruction teacher can use the homebound child's locus of control perceptions to the child's advantage will depend upon how well the teacher is prepared to recognize

differences in children's responses to reinforcement. Therefore, training programs for either the reeducation of teachers or the preparation of graduate students should include observation of children's responses to reinforcement, recognition of differences in children's responses and appropriate use of reinforcement for shaping behavior.

Component 4 - THE REINTEGRATION OF HOMEBOUND CHILDREN

Curriculum Development and Instructional Treatment.

There is need for further study of the population and school variables as they relate to child development and academic function. Retention of subjects on home instruction appears to be unrelated to IQ, academic achievement, locus of control beliefs, or to any demographic variable other than disability. While three quarters of the physically disabled and the health impaired were referred to school programs, only one-quarter of the emotionally disturbed subjects were similarly referred. In spite of the academic gains made by "external" subjects, less than half of them were referred to group placements. (Only three of these externals had been initially placed on home instruction because of emotional disturbance; the others were physically impaired.)

Under New York State Law and public policy (Matter of Reid, 1973), all children who have been diagnosed as handicapped must be placed in appropriate classes. Despite strong statements of public policy, children with behavioral or emotional handicaps in this Project were still being retained in the isolated home instruction program.

There is need for an increase in the number of community classes for these children. In part, the inability of the system to reintegrate a larger

percentage of emotionally disturbed subjects appears to be a result of this lack. It is suggested also that disturbed subjects receiving the homebound services require skilled attention to their social-emotional as well as academic needs.

While the Project results suggest the desirability of using the one-to-one teaching relationship to enhance academic gain, there remained the problem of the child's inappropriate interaction with peers. Extended home instruction may be particularly unsuited for a handicapped child who needs to develop social relationships and learn to work within a group. Also worthy of exploration is the appropriateness of home instruction for the child whose learning and/or emotional problems may be a product of the home environment. If the number of socially/emotionally disturbed children who make successful adjustments to school settings is to be increased, it is suggested that the one-to-one relationship between homebound pupil and home instruction teacher be taken advantage of to teach the child those skills and behaviors which will permit his successful return to the classroom as quickly as possible. Additional exploration is needed to define teaching/learning tasks which might form the basis of a curriculum whose final objective is to return the child to the school setting.

To attack the various reintegration problems, attention should be addressed to the realities of a collaborative effort between the Board of Education and the University. Many bureaus are involved in servicing special education children. Two such Bureaus are the Bureau for Education of the Physically Handicapped and the Bureau of Child Guidance. Although mutual involvement in the project was maintained by the Bureau for Education of the Physically Handicapped

and Teachers College, efforts by university personnel to engage the interest of the Bureau of Child Guidance were ineffective. Since this bureau has had as one of its primary functions the appropriate placement of troubled children, the absence of its participation in the Homebound Project tended to weaken reintegration efforts. The establishment of criteria upon which reintegration could be effected need to be enunciated. Therefore plans for any collaborative effort involving the university and a large public school system for the development of a training program, whatever the purpose, must include all parties having influence in the target population.

General Evaluative Summary

A. The major strengths of the program, according to the participants, appeared to have been:

.The variety of placements;

.The number of professional personnel available to the preservice participants to provide direction and advice;

.The field based nature of the program with its reality focus;

.Exposure to the total resources of Teachers College;

.Exposure to the latest facts and studies related to the education of ED and COHI populations;

.The Taxonomy as a schema for organizing strategies and content;

.The Project Coordinator and her recognized influence upon the program;

.The presence of a highly intelligent group of Masters Degree students.

B. The major weaknesses of the program appeared to have been:

.The variety of placements, though profitable, permitted too little time in each;

.The difficulties perceived as present within the Homebound Teacher group;

.The need for tighter organization of the content, especially a more intensive workshop on ways of implementing the Taxonomy;

.The need for better understandings of supervision on the part of the Instructional Assistants;

.The need for more precise understanding of the Taxonomy on the part of the Instructional Assistants;

.The need for more time commitment from the Instructional Assistants;

.The need for clarification of roles and functions on the part of all involved with the program;

.The need to avoid some types of parent-child relationships on the part of the preservice participants and the training staff (greater student independence needed);

.The need to relate the concerns of ED and COHI children to regular education personnel.

C. Implications for Model Building of a Training Program Based upon the Participants Recommendations:

The experiences in this program suggested directions for model building that are worthy of exploration. No one could have anticipated all these prior to the Project's implementation and yet some of them are, in fact, endemic to teacher training with solutions hard to find.

.All participants in a program of this sort should have total understanding of the nature of the program before they join it. Such understanding must be present on the part of students, teachers, trainers, parents and all others to be involved;

.All participants should express a complete willingness for involvement to provide the greatest levels of commitment possible;

.All participants should be screened and selected for personality strengths as well as academic abilities and for teaching skills;

.The trainers need to be able to demonstrate appropriate supervisory skills;

.In the learning situation inservice teachers should agree to join with preservice students and such willingness should be translated into cooperative actions;

.Professionals (the Homebound Teachers) need careful role clarification toward the preservice participants;

.All members of the training staff need similar role and function clarification from the beginning of the program;

.Those to be involved as leadership professionals (the Homebound Teachers and Instructional Assistants) need early involvement with the program including participation in its design;

.Those to be involved as leadership professionals (the Homebound Teachers and Instructional Assistants) need conviction that they have a professinal contribution to make and that appropriate respect for their roles is facilitated;

.The College training staff should participate in assessment of and programming for the children in the field placements;

.Field placements should be selected on the basis of both educational power and convenience;

.The selection of preservice participants should include an educational and experiential profile in an attempt to increase homogeneity along some criteria to facilitate group membership;

.No one program can do all things. Goals must be limited and placed in priority. It is difficult to train masters degree students from too varied backgrounds through one program without resources to individualize according to student needs and experiences;

.The field based program did work; yet it requires time plus intense intervention if children's learning increments are to be substantiated;

.Cross-categorical training required broad knowledge of the total field of special education as well as new concepts regarding the use of time and its relationship to content in order to provide the necessary depth;

.Cross-categorical training requires background perspectives from formal work in the Sociology of the Handicapped, Learning Theories, Growth and Development, Mental Health, Classroom Management, Curriculum Development and Instructional Theories. The regular child population in the schools should be a point of reference at all times.

This program represented an innovative approach to the training of teachers. It was reality based, brought students into the field immediately and exposed them to real children to their families and their homes. It exposed graduate students to some outstanding professionals in the various aspects of Special Education. It provided them with the challenge of a new instructional treatments approach--the Taxonomy. The students were given support from a didicated

staff; all of these graduates are now employed as professional educators, some in leadership positions, in both urban and rural communities. The program has taught much about what can be done and it has indicated other things that might be done. As such it was a valuable experience. It was provocative as well. For many of the problems presented, solutions have not as yet emerged.

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APPENDIX A

A Taxonomy of Instructional Treatments
(Reading Arts)

Content

Basic Skills	Basic Subskills	Sequential Level
1. Cognitive-Perceptual	1. Symbolic Discrimination 2. Memory Span 3. Directionality-Laterality 4. Time Relationships	1. Readiness 2. Primary 3. Intermediate 4. Upper
2. Language Analysis	1. Alphabet 2. Consonants 3. Vowels 4. Word Decoding 5. Sight Vocabulary 6. Word Structure 7. Word Analysis 8. Syntax	
3. Comprehension	1. Main Idea 2. Details 3. Sequence Relationships 4. Labeling 5. Word Meaning (Independent of Context) 6. Word Meaning (In Context) 7. Content Inference 8. Critical Analysis 9. Recreational Reading	
4. Study Skills	1. Skimming 2. Dictionary 3. References and Texts 4. Maps, Graphs and Tables 5. Speed and Accuracy 6. Library 7. Following Directions	

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APPENDIX A1

COMPREHENSIVE TAXONOMY

Strategy

Instructional Setting	Instructional Mode	Communication Input	Communication Output
1. Teacher-Total Class	1. Exploration	1. Visual	1. Oral Response
2. Student Self-Instruction	2. Problem Solving (Divergent)	2. Auditory-Visual	2. Motoric Response (Marking and/or Writing)
3. Teacher-Subgroup	3. Testing Recall	3. Auditory	3. No Response
4. Teacher-Student	4. Problem Solving (Convergent)	4. Motoric (Haptic, Tactile, Kinesthetic	4. Oral-Motoric (Marking and/or Writing)
5. Student-Student Parallel	5. Exposition	5. Auditory-Motoric	5. Motoric Response (Gestures and/or Movement)
6. Student-Total Class	6. Game Competition Standard	6. Visual-Motoric	6. Oral-Motoric Response (Gestures and/or Movement)
7. Student-Subgroup	7. Game Competition Player	7. Auditory-Visual-Motoric	
8. Student-Student Tutorial	8. Game Competition Field	8. Self-Stimulation	
9. Student Self-Directed	9. Game Competition Team		
10. Student-Student Interactive	10. Role Playing		
11. Group Self-Instruction	11. Programmed Response		
12. Group Self-Directed	12. Patterning		

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OPERATIVE TAXONOMY

Strategy

IV. Instructional Setting	V. Instructional Mode	VI. Communication Input	VII. Communication Output
1. Teacher-Total Class	1. Exploration	1. Visual	1. Oral Response
2. Student Self-Instruction	2. Problem Solving (Divergent)	2. Auditory-Visual	2. Motoric Response (Marking and/or Writing)
3. Teacher-Subgroup	3. Testing Recall	3. Auditory	3. No Response
4. Teacher-Student	4. Problem Solving (Convergent)		4. Oral-Motoric (Marking and/or Writing)
5. Student-Student Parallel	5. Exposition		

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Glossary of Taxonomic Terms

Content

I. Basic Skills

1. Cognitive-Perceptual: - Primary conceptual and perceptual functions such as understanding sequential time relationships or discriminating basic shapes. These skills are considered prerequisites for the acquisition of other basic reading skills -- language analysis, comprehension and study skills.

2. Language Analysis: - Language elements from minimal to large units, and the synthesis of those units into meaningful contexts.

3. Comprehension: - The understanding and interpretation of what is read.

4. Study Skills: - Those tools which are taught by the teacher and used by the child to facilitate self-instruction and which are prerequisite for higher level independent inquiry.

II. Basic Subskills (grouped under their respective basic skills)

1. Cognitive-Perceptual:

1. Symbolic Discrimination: - Differentiation and labeling of objects, shapes, letters and sounds.

2. Memory Span: - Retaining and retrieving units of information.

3. Directionality-Laterality: - Left/right orientation of body schema and the establishment of one-sided motor preferences.

4. Time Relationships: - Sequencing of actions or events in the order of their occurrence.

5. Space Relationships: - Locating objects in space and the use of concepts such as over, under, in, on, etc.

2. Language Analysis

1. Alphabet: - The mechanical manipulation of the alphabet letters and the association of the letters with graphic symbols, ignoring the phonic elements involved in sounding.

2. Consonants: - To label and sound consonants and to use this skill in decoding words.

3. Vowels: - To label and sound vowels and use this skill in decoding words.

4. Word Decoding: - To make integrative use of consonant and vowel sounds for the purpose of reading words.

5. Word Recognition: - To discern whole words without extended decoding of the word components.

II. Basic Subskills (cont'd)

2. Language Analysis (cont'd)

6. Word Structure: - To recognize lawful and unlawful letter-sound associations in words.

7. Word Analysis: - Meaningful parts of words (roots, suffixes, prefixes) that can be combined to create more extended language units on the word level.

8. Syntax: - To use grammatical structure or word order patterns in sentences and phrases.

3. Comprehension

1. Main Ideas: - Identification of central ideas in paragraphs and stories.

2. Details: - Selection of specific information from sentences, paragraphs and stories.

3. Sequence Relationships: - Recalling and organizing in sequential order specific details of sentences, paragraphs and stories.

4. Labeling: - To offer several applicable labels for an object or activity.

5. Word Meaning (Independent of Context): - Defining isolated words.

6. Word Meaning (in Context): - To select out of several possible meanings the one meaning appropriate to a word in a particular context.

7. Content Inference: - To infer the meaning of a sentence, paragraph, and story when the meaning is not explicit.

8. Critical Analysis: - The evaluation of information, ideas and opinions contained in reading materials or discussions.

9. Recreational Reading: - Reading for pleasure. Recreational reading carries the added component of being a means by which reading skills are practiced and expanded.

4. Study Skills

1. Skimming: - Scanning reading materials to gain either an overall impression of the content or specific information within the content.

2. Dictionary: - The location and pronunciation of words, syllabication, stress and diacritical marks, syntax and selection of appropriate word meaning from a list of definitions.

3. References and Texts: - Two use of indices, chapter headings, sub-headings and bibliographies of reference books and texts for the purpose of locating information.

II. Basic Subskills (cont'd)

4. Study Skills (cont'd)

4. Maps, Graphs and Tables: - The reading and construction of maps, graphs, and tables.

5. Speed and Accuracy: - The acceleration of reading speech without a concomitant loss in comprehension.

6. Library: - The use of library resources, e.g., audiovisual equipment, books, catalogues, journals, etc.

7. Following Directions: - The use of prepared instructions to stimulate a pre-determined plan of activity.

III. Sequential Levels

1. Readings: - The instructional range for reading that encompasses reading skills up to and including first grade.

2. Primary: - Includes second and third grade reading skills.

3. Intermediate: - Encompasses fourth through sixth grade reading skills.

4. Upper: - Encompasses reading skills in the seventh and eighth grades.

5. Multilevel: - A range of grade levels in which the total class membership can participate regardless of the children's functional reading levels.

IV. Instructional Setting

1. Teacher-Total Class: - A prescribed grouping of students in attendance that day involving task interaction between teacher and students.

2. Student Self-Instruction: - A student working alone on an instructional task that is teacher-initiated and -prescribed.

3. Teacher-Subgroup: - Less than the total number of students in attendance that day being involved in a teacher-prescribed task that requires task interaction between the teacher and students (excluding teacher-student).

4. Teacher-Student: - A one-to-one instructional interaction between the teacher and the student.

5. Student-Student Parallel: - Two students working in close proximity on teacher-prescribed tasks, possibly sharing material or equipment with no physical or verbal interaction between the students intended.

6. Student-Total Class: - A student is assigned to instruct all attending class members in a teacher-prescribed task.

7. Student-Subgroup: - A student is assigned to instruct less than the total number of attending class members in a teacher-prescribed task.

8. Student-Student (Tutorial): - A two-student grouping based on an inequality of skills in which the more skilled student functions as tutor to the less skilled one.

9. Student Self-Directed: - A student, with teacher approval, working alone on a self-initiated and self-prescribed instructional task.

10. Student-Student Interactive: - Two students working on a teacher-prescribed task involving the sharing of material or equipment and requiring either social or task-oriented interaction between them.

11. Group Self-Instruction: - At least three students cooperatively involved in a teacher-initiated and -prescribed task.

12. Group Self-Directed: - At least three students cooperatively involved in a group-initiated and -prescribed task that has the teacher's approval.

V. Instructional Mode (i.e. Transactional styles or tactics between the teaching stimulus and the learner)

1. Exploration: - Involves an open-ended task that does not necessarily culminate in a product.

2. Problem Solving (Divergent): - Involves discrimination of relevant and irrelevant data and manipulation of relevant data in order to reach an indefinite set of responses.

V. Instructional Mode (cont'd)

3. Testing Recall: - Involves the student's ability to retrieve facts either immediately or after a lapse of time.

4. Problem Solving (Convergent): - Involves discrimination of relevant and irrelevant data and manipulation of relevant data in order to reach a predetermined set of responses.

5. Exposition: - Involves the teacher, or a student, as the central figure in transmitting instructional content to an essentially passive audience.

6. Game Competition, Standard: - Requires striving by the participant(s) to meet a performance standard that is imposed by any of the following: the teacher, the nature of the game itself, or the participant's inherent competitiveness.

7. Game Competition, Player: - Requires two participants to compete with each other to be the winner of the activity.

8. Game Competition, Field: - Requires the participants to strive against a field of others, all of whom are seeking to be the only winner in the game.

9. Game Competition, Team: - Requires that the participants be divided into teams, each team becoming the unit of competition that seeks to be the winner of the activity.

10. Role Playing: - Involves play acting in which the content and the assumption of roles can be either preplanned or spontaneous.

11. Programmed Response: - Involves extensive exposition, small sequential learning steps and immediate student feedback.

12. Patterning: - Involves the teacher, or a student, as the central figure in transmitting instructional content (verbal or nonverbal) to an audience that replicates the content immediately.

VI. Communication Input (i.e. The learner's sensory modalities available to mediate the instructional stimuli)

1. Visual: - Reception of instructional stimuli through the sense of sight.

2. Auditory-Visual: - Reception of instructional stimuli through the senses of hearing and sight.

3. Auditory: - Reception of instructional stimuli through the sense of hearing.

4. Motoric (Haptic, Tactile, Kinesthetic), - Reception of instructional stimuli through the sense of touch in the palm (haptic), or fingers (tactile), or through the sense of movement and tension in muscles, joints and tendons (kinesthetic).

VI. Communication Input (cont'd)

5. Auditory-Motoric: - Reception of instructional stimuli through the senses of hearing and touch (haptic, tactile) or body movement (kinesthetic).

6. Visual Motoric: - Reception of instructional stimuli through the senses of sight, touch (haptic, tactile) or internal body movement (kinesthetic).

7. Auditory-Visual Motoric: - Reception of instructional stimuli through the senses of hearing, sight and touch (haptic, tacticle) or internal body movement (kinesthetic).

8. Self-Stimulation: Internally initiated stimuli on the basis of imagination, projection, or recollection of earlier experience.

VII. Communication Output (i.e. The channels to be used by the pupil to demonstrate reactions or responses to information received by the input channel)

1. Oral Response: - Vocal expression in reaction to instructional stimulus.

2. Motoric Response (Marking and/or Writing): - Marking or written experssion in reaction to instructional stimulus.

3. No Response: - No overt expression in reaction to instructional stimulus.

4. Oral-Motoric (Marking and/or Writing): - A combined vocal and motoric (marking or writing) expression in reaction to instructional stimulus.

5. Motoric Response (Gestures and/or Movement): - Gestures or movement in reaction to instructional stimulus.

6. Oral-Motoric Response (Gestures and/or Movement): - A combined vocal and motoric (gestures or movement) expression in reaction to instructional stimulus.

APPENDIX B

Summary of Sample Characteristics

Measure	Emotionally Disturbed (N = 37)	Physically Handicapped (N = 30)	Health Impaired (N = 14)	Overall (N = 81)	Statistic
Chronological Age					
Mean	13.53	14.17	14.30	13.90	$F_{(2,78)} = .60$
SD	2.84	2.52	2.97	2.73	
Range	7.8-20.4	7.6-19.4	8.3-18.6	7.6-20.4	
IQ					
Mean	80.65	89.43	84.79	84.62	$F_{(2,78)} = 1.65$
SD	20.25	19.74	17.80	19.83	
Range	33-119	36-137	58-130	33-137	
SES					
Mean	3.70	4.70	3.93	4.11	$F_{(2,78)} = 1.24$
SD	2.46	2.78	2.60	2.63	
Range	1-8	1-9	1-10	1-10	
Months Homebound					
Mean	11.05	8.13	15.71	10.77	$F_{(2,78)} = 1.65$
SD	8.68	15.31	16.59	13.05	
Range	2-30	1-72	1-54	1-72	
Race					
B	21	10	8	39	$X^2_{(4\ df)} = 4.28$
NCW	10	12	4	26	
W	6	8	2	16	
Sex					
Boys	27	21	4	52	$X^2_{(2\ df)} = 9.42^*$
Girls	10	9	10	29	

*$p < .05$

APPENDIX C

May 26, 1972

Mr. Richard Albert Punzo
34 Crest Road
Framingham, Massachusetts 01701

Dear Mr. Punzo:

Your acceptance of the training grant for which you were nominated under Public Law 91-230 carries with it a commitment to participate in a special project that was initiated in September 1971 as a collaborative effort with the New York City Board of Education. Therefore, your acceptance of the grant should be based on a prior understanding of the project and the responsibilities that your commitment to it entails. We hope that the ensuing description of the project will enable you to make a judicious decision.

The project represents a cross-categorical, intradepartmental (Emotionally Disturbed/Crippled and Other Health Impaired) effort that focuses on these two handicapped populations receiving instruction in either the home or other field activities. In order to meet the unique educational needs of these children, New York City teachers of the Homebound and Teachers College masters degree students receive training in the Taxonomy of Instructional Treatment, a systematic instructional framework that is applicable to the whole range of disabilities with which special educational teachers may be confronted.

Taxonomic training is given in a regularly scheduled block of interrelated seminars, workshops and conferences to the masters and post-masters degree students and to New York City Board of Education supervisors and teachers of Homebound Instruction. For an eight-week period, each masters degree student is teamed with a homebound teacher who, for the first two weeks of the period, acts as the student's agent to provide entree into homes and guidance for the development of favorable relations with the children and their families. During this time, each masters student follows the teacher's daily schedule in order to observe the teacher in instructional interaction with the children, administer and interpret test instruments and conduct interviews with parents. At the end of the two weeks, the masters student will select four homebound children for whom instructional service will be provided on a regular basis that is independent of the homebound teacher's schedule.

Opportunity to confer with the homebound teachers involved with the children will be provided on a weekly basis. Homebound placement will last for eight weeks, at which time the masters degree student, in addition to being assigned to a second field placement, will select at least one child from the group who will receive one hour of instruction a week for the remainder of the academic year. It is believed that the homebound field setting provides an indepth view of the sociological problems besetting the system's efforts to educate socially disadvantaged children, for it is from the socially disadvantaged segment of

society that the homebound emotionally disturbed child is drawn.

If you have any questions, please do not hesitate to write or call.

Sincerely yours,

Frances P. Connor

FPC:lj

APPENDIX D

1. The Skills and Knowledge (other than content) Required of the Practicing Teacher of the Handicapped Population

   A. Knowledge of the components of the communication process

      1. the transmitter
      2. the receiver
      3. the atmosphere
      4. statis in the system
         a. nature of static
         b. consequences of static
         c. sources of
      5. the message
      6. the function of the teacher in the communication process
      7. the function of the pupil in the communication process

   B. Knowledge of the nature and needs of the handicapped population

   C. Observational skills--objective and nonobjective

      1. as applied to the teacher
      2. as applied to the pupil

   D. Knowledge of child development

      1. sequence of social skills
      2. sequence of self-constraining skills
      3. developmental sequence of input channels
      4. developmental sequence of output channels
      5. interruptions in the developmental sequences of the handicapped child

   E. Knowledge of test instruments

      1. social
      2. psychological
      3. emotional
      4. academic
      5. physiological
      6. the relevancy of test instruments for the handicapped population

   F. Diagnostic skills

      1. using case histories
      2. using standardized tests
      3. using objective and nonobjective observations
      4. using evaluations of instructional prescriptions
      5. developing baseline educational profiles

   G. Skill in prescribing instruction

   H. Skill in instructional experimentation

Appendix D - Continued:

I. Skill in modifying or originating testing instruments and materials for the handicapped population

J. Skill in evaluating an instructional act

2. Receptive Experiences for Trainees During Pre-Service Training

A. Recommended course work in the following areas:

1. Emotionally disturbed
2. Hard of hearing
3. Visually impaired
4. Neurologically impaired
5. Other handicaps
6. Tests and measurements
7. Physiology and neurology
8. Mental Health
9. Urban education
10. Curriculum development
11. Child development
12. Language development

B. Course of study using the Taxonomy of Instructional Treatment as an instrument for:

1. Diagnosis
2. Observation
3. Experimentation
4. Instructional prescriptions
5. Evaluation

C. Field experiences

1. Observation of teachers and pupils in various special education facilities
2. Tutorial work with individual pupils
3. Acting as a teacher--aide in the classroom
4. Taxonomizing materials in resource center

D. Independent Study

E. Workshops

F. Readings

G. Analysis of mini-lessons

3. Expressive Experiences--Products Issuing from Receptive Experiences

A. Independent study papers

1. Development of taxonomies for specific handicaps

Appendix D - Conintued:

2. Development of other taxonomic content such as math
3. Development of other observational scales
4. Development of syntheses of the literature

B. Field experience products

1. Evaluation of available instruments, curricula, materials, programs and models as applied to the handicapped population
2. Modification of above as indicated by the evaluation

C. Materials production

1. Modification of available instructional materials and instruments for specifically handicapped pupils
2. Origination of material and instruments for specifically handicapped pupils

D. Projection of strategies for new mini-lessons and participation in the filming of such mini-lessons

Competency: Observation

APPENDIX D

Interrealted COHI-Ed

Skill	Knowledge	Program Experiences		Perofmrmance Indicators	
		Skill	Knowledge	Skill	Knowledge
2.0 Describe the normal development of social control and self-containment skills.	2.0 Child development in terms of social control and self-containment skills.	2.0 TE3510 - Nature and Needs of the Emotionally Disturbed TE3410 - Nature and Needs of the Physically Handicapped Observations of pupil behavior in various educational settings.		2.0 Diaries behavior analyses of 3 pupils in terms of expected inappropriate, unexpected inappropriate, unexpected appropriate, and expected appropriate social patterns.	2.0 The Taxonomy of of Instructional Treatment as an instrument of evaluatin the level of social control and self-containment skills.
2.1 Describe the deviations and maladaptive behavior patterns that may occur in the development of social control and self-containment skills.	2.1 Deviations and maladaptive behavior patterns that occur in the development of social control and self-containment skills.	2.1. Seminars in the selection of taxonimic options for use in instructional treament--the development of criteria for selection.			
		2.2 Analyze and assess observed pupil behavior for levels of self-containment and social control.	2.2 The relationships of the taxonomic variables of instructional setting and instructional mode to the development course of social control and		

Competency: Observation - Continued

Interrelated COHI-ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
			self-containment.		
		2.3 Use of such assessments in the selection of taxonomic variables pertaining to social control and self-containment.			
3.0 See 1.0 - 1.5	3.0 Psychodynamics of teacher/pupil behaviors during the instructional act that facilitate the transmission and reception of information.	3.0 Seminars in observational systems. Field experiences in recording teacher/pupil behaviors using various observational systems.		3.0 See 1.0-1.1	3.0 The Taxonomy of Instructional Treatement as an observation model and a system for recording behavior during the instructional act.
3.1 See 2.0 - 2.1	3.1 Familiarity with various systems for recording observations.	3.1 See 1.0-1.4	3.1 Familiarity with taxonomic theory, practices and variables.	3.1 See 2.0	
3.2 Describe one closed and one open system for recording the dynamics of teacher/pupil behaviors during the instructional act.		3.2 See 2.0-2.3	3.2 Familiarity with Flanders observation system.	3.2 Five lesson plans that are expressed in the taxonomic verbal system.	

Competency: Observation

Interrelated COHI-ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
		3.3 Think and speak of instructional acts in terms of the taxonomic verbal system.		3.3 Five observations of classroom instruction that are recorded in the taxonomic symbol system and interpretation of these observations in terms of recommendations for instructional planning.	
		3.4 Record ongoing instructional acts using the following observation systems: a. the taxonomic symbol system b. the four dimensional framework of the Diaries: expected/inappropriate, unexpected/inappropriate,			

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Competency: Observation - Continued

Interrelated COHI-ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
		unexpected/ appropriate, expected/ appropriate.			
		3.5 Summarize the basic principles of Flander's observational system.			
		3.6 Specify the differences between the taxonomic and Flander's systems.			

Competency: Prescriptive Teaching

Interrelated COHI - ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
4.0 Select stimuli to facilitate reception of information through intact sensory channels and selection of sensory output channels to elevate child's expressive ability.	4.0 Normal development of sensory input channels.	4.0 Guest speakers in the fields of visual and auditory impairment.		4.0 Administer three Peabody Picture Vocabulary Tests and interpret results in terms of selecting taxonomic options.	4.0 The Taxonomy of Instructional Treatment as an instrument for planning prescriptive instruction for visually and/or hearing impaired children.
4.1 Delineate normal development of input/output channels.	4.1 Deviancies in normal development, how they are assessed and the effects of such deviancies on learning.	4.1 Analyze tests that measure deviancies in the development of sensory input channels; interpret test results; evaluate the extent of impairment.	4.1 Tests designed to measure impairment to sensory input channels.	4.1 Administer three Wepman Tests of Auditory Discrimination and interpret results in terms of selecting taxonomic options.	
4.2 Describe common deviancies in normal development, assessment devices, and effects of deviancies on learning.	4.2 Normal development of output channels.	4.2 Taxonomic variables that pertain to input and output channels.	4.2 Interpret test results of three Illinois Tests of Psycholinguistic abilities in terms of taxonomic options.		
	4.3 Deviancies in normal development, how they are assessed.	4.3 Describe the implications of 4.1 & 4.2 for prescribing taxonomic options consonant with the child's sensory input/output development.		4.3 Plan a sequence of 5 instructional treatments for a visually and/or hearing impaired child.	

Competency: Evaluation

Interrelated COHI - ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
5.0 Select test instruments relevant to the target population.	5.0 Test instruments used to evaluate impairment in the cognitive, affective and psychomotor areas and the population from which the norms were derived.	5.0 TP3500 - Introduction to Measurement TE3130 - Tests and Remedial Work for the Handicapped.		5.0 Relationales for the selection of 3 test instruments for a handicapped child.	3.0 (See 5.1 Col. 2 - Knowledge.)
5.1 Define the following terms: percentiles, standard scores, reliability, validity, correlation coefficient, standard error of measurement, validity, standardization.	5.1 Statistical concepts commonly found in test manuals.	5.1 Assess the relevance of test instruments in terms of the child's handicapping condition.	5.1 (See 5.0, Col. 2 - Knowledge.)	5.1 Interpretation of results of 3 test instruments in terms of statistical concepts.	
		5.2 Interpret test scores in terms of statistical concepts.			

Competency: Test Modification

Interrelated COMI - ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
6.0 Adapt the administrative procedures of the WRAT to increase the relevancy of measurement to the target population.	6.0 The standardized procedures for administering the Wide Range Achievement Test and the population from which norms were derived.	6.0 Observations of children in the field. 6.1 Demonstrations of test modification. 6.2 Practice in test item modification and test procedure adaptation.		6.0 Written descriptions of the handicapping conditions of two children.	6.0 (See 6.0 - 6.1, Col. 2 Knowledge.)
6.1 Modify test items of the WRAT to establish levels of functioning.	6.1 See 4.0 - 4.3			6.1 Written descriptions of WRAT adaptations and modifications with accompanying rationales for these procedures for two children.	
		6.3 Adapt administrative WPAT procedures to the impairments of specific children.	6.3 The overt cognitive, effective, psychomotoric behaviors of the children to be tested.		
		6.4 Modify test items of WRAT to cognivie, affective and psychomotoric functional levels of specific children.			

Competency: Diagnosis of Academic Abilities

Interrelated COHI - ED

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
7.0 Diagnosis using case histories, standardized tests, objective/non-objective systems of observations for the purpose of developing inventories of strengths, near strengths and weaknesses.	7.0 General construction of case histories.	7.0 TE3130 - Tests and Remedial work for the	Handicapped.	7.0 Inventories of strengths, near strengths, and weaknesses for three children.	7.0 The Taxonomy of Instructional Treatment as a tool for for developing instructional prescriptions for children.
	7.1 Task components and content pertinent to specific disabilities.	7.1. Guest lectures from the field of hearing, auditory impairment, and COHI		7.1 Sequences of instructional treatment for three children.	
	7.2 See 3.4	7.2 Extract from case histories standardized tests and observational systems indicators of developmental deviance and maladaptive behavior patterns.	7.2 See 4.0 - 4.2.		
	7.3 See 4.0 - 4.3.	7.3 Extract from case histories standized tests and observation systems	7.3 Taxonomic theory, practice and variables.		

Competency: Diagnosis of Academic Abilities - Continued

Skill	Knowledge	Program Experiences		Performance Indicators	
		Skill	Knowledge	Skill	Knowledge
		indicators of developmental normality and adaptive behavior patterns.			
	7.4 See 5.0 - 5.1	7.4 Apply summarized data to the Taxonomy of Instructional Treatment.			

APPENDIX E

PROJECT OBJECTIVE

Behavioral Taxonomic Training Objectives

In addition, the project aimed to inculcate certain behavioral processes in the teaching staffs of the target schools and to achieve some key product out-comes among the pupils of these schools. The process objectives for teachers were pursued in the sequence listed below. No special sequence was expected in attaining the product out-comes for pupils, but it was expected that the trainee's achievement of the objectives would be manifested in the performance indicators described in the charts immediately preceding this section, (see pages

Taxonomic Training Objectives

1. Knowledge of the terminology of contents and strategies in the Taxonomy of Instructional Treatment (see Appendix A and A-1): In order to become a more effective instructor, the teacher needs a clear understanding of the organization of subject matter in terms of dimension and sequence and the arsenal of strategies he can employ in administering his lessons. This is fundamental to his craft. The taxonomy model organizes such information for him comprehensively.
2. Ability to describe existing instructional materials taxonomically: The most elementary level of applying the Taxonomy is in relationship to existing instructional aids. Each piece of material covers particular content and is supposed to be administered by a certain strategy at a specified difficulty level. It is, therefore, possible to characterize and catalogue such material according to the Taxonomy, which contains the total index of possibilities. By practicing this task, the trainee

Appendix E - Continued:

will sharpen his understanding concerning the organization of instructional aids.

3. Ability to describe teaching behavior taxonomically: Focused observation on instructional strategies is a vital tool for teacher training. It helps the trainee understand what constitutes the instructional role of the teacher and how he practices his craft. The Taxonomy can pinpoint precisely what is happening and begin to form some judgments as to the appropriateness of certain elements in teacher behavior.
4. The ability to modify existing materials and observed teacher behavior taxonomically: Now that he has learned something about the "what" and "how" of instruction, the trainee should begin to exercise his inventiveness in designing changes in method and materials. He can practice by consulting the taxonomy for alternative possibilities (flexibility) in content and strategy as clues to implementation in a new design.
5. Ability to create original instructional materials and behaviors: After showing skill in using existing plans as a springboard for variations on them, the teacher needs further practice in original thinking to enhance his training. The extent to which divergent implementation processes contribute to effective instruction is often underestimated in research and theory on teaching. Instructional planning to be done scientifically without heavy reliance on teacher imagination requires guided practice. While increasing his fluency in formulating original lessons and supportive materials, the teacher's previous exercises in learning the language of taxonomy should enable him to catalogue these lessons for easy retrieval when he needs them.

Appendix E - Continued:

6. Ability to brainstorm lesson planning around a single taxonomic stimulus: Since the Taxonomy indexes the widest possible range of "how's" and "what's" of instruction, each item in the system could represent any number of specific plans. For example, if a teacher wants to design a lesson around the location of main ideas--which is one of the sub-skills listed in the Taxonomy--he should be able to put together any number of materials that are appropriate for this purpose. If, in addition he wants to follow the taxonomically listed strategy of providing his pupils with an individual self-instruction setting, a game of chance format, involving the pupils' visual modality for receiving information, and calling for some kind of written response, he could be able to plan a respectable number of classroom experiences that fit this description. Again, the only way to accomplish it is through guided practice and brainstorming.
7. Ability to expand his strategy repertoire: Simply designing instruction is not enough; the teacher has to be able to act out his designs comfortably and effectively. Many teachers are able to verbalize their ideas and are even fairly fluent in creating them, but their instructional habits are rigidly sterotyped and restricted to a narrow band of alternatives that are most comfortable for them. The point here is to make the teacher so flexibly adaptive that he can become more easily responsive to the learning styles of children rather than remaining fixed in his own groove. This is one of the most critical aspects of the training program which calls for the utilization of the Taxonomy as a means of expanding the teacher's instructional role as a performer not just as a planner behind the scenes.

8. Ability to describe children in Taxonomic terms: The next stage in the training process brings the teacher closer to developing a "goodness of fit" between the content and strategy he employs on the one hand and children's learning capacities and styles on the other. Using the Taxonomy as a guide, the teacher can record each pupil's learned and nearly learned skills while monitoring the way the pupil behaves when this content is "packaged" in different strategies. He has to take note of the sensory modalities that the pupil prefers in sending and receiving messages, the instructional tactics that are most likely to arouse his attention and sustain it for the longest period of time, and the social setting in which there is the least amount of learning inhibition for him. By adding such information to the formal diagnostic data, the teacher will be able to reduce considerably the amount of guess work that often characterizes lesson planning.

9. Ability to plan Taxonomic instruction as a derivative of diagnostic insight: Measurement techniques is in essence a search for cognitive strength that is under-utilized because of inadequacies in what some psychologists call "entering behavior" in problem-solving situations. The child's intellective status is therefore less important than the extent of his modifiability, the amount of teaching involvement necessary to bring about improved performance, and the transferability of newly acquired learning habits to tasks. In psycho-linguistic terms, the child needs help in framing and focusing on the essential demands of a cognitive task so that he can demonstrate his facility for encoding, decoding, and making the necessary cognitive associations. Testing for modifiability, then, is not just a proble of how well the child performs but also how

he performs stylistically. The idea is to help the child extinguish the inhibitive styles and cultivate those that are most facilitating as he undergoes a long series of systematically controlled problem solving exercises. This process of observing the child's responsiveness to stimuli as a basis for mediative learning has been adopted as an essential tactic for diagnosis in taxonomic instruction.

10. Ability to model and habituate effective instructional behavior: One of the major supportive activities of the project is to apply the Taxonomy in a systematic analysis of effective instructional behavior defined as such by subjective and objective criteria. The outcomes will apply only to the homebound populations and will form a basis for training the target teacher population to become most skillful in methodology that is consistently associated with effective instruction. This will involve modeling videotaped lessons until the practiced effects take hold. Thus, if teachers eventually favor a particular methodology, it will be the kind that has proven most successful in achieving the scholastic and behavioral goals of the homebound children.

APPENDIX F

Dr. F. Connor Educational implications of physical and health disabilities. Prof., Department of Special Education (COHI).

Dr. A. Tannenbaum Educational implications of emotionally disturbed, behaviorally disordered youth. Prof. Special Education (E.D.).

Dr. I.I. Goldberg Education of all handicapped children. Prof., of Special Education (M.R.).

Dr. R. Silberman Sensory deprivation and education consequences. Instructor, Department of Special Education (V.I.).

Ms. D. Fox Auditory assessment: implications for learning impairment, language and speech development. Instructor, Department of Special Education (H.I.).

Dr. H. Rusalem The ecology of special education. Prof., Department of Special Education (Guidance and Research).

Dr. S. Reichart Present and future roles of teachers in special education. Prof. of Education, Case Western Reserve University.

Mrs. E. Rosenbluth Implications of the Taxonomy of instructional treatments in classrooms for multiply handicapped children. New York City teacher, Center for Multiply Handicapped Children.

Dr. J. Fleischner A learning disabilities approach to the education of homebound children. Ass. Prof., Department of Special Education (L.D.).

APPENDIX G

Children's Internal-External Control Scale

Morrison (1966, p. 124) developed and tested an adaptation of Rotter's Internal-External Control Scale. This adaptation, known as the Children's Internal-External Control Scale (CIE), was used in this study to assess the extent to which favorable reactions from others were believed by the child to depend either upon the quality of his own efforts or upon extraneous factors. Since there was a wide range of reading levels among the subjects, test administration procedures were modified so that examiners were instructed to read the directions as well as the test items while subjects "followed along."

The 26-item Internal-External Control Scale contains 23 forced choice items which pair an internal control referent against an external control referent. The other three item pairs are fillers. The subject's task is to select that alternative within each item that he believes to be most often true. For this study each item was scored as internal (1 point) or external (0 points), creating a possible range of scores from 0 to 23, indicating extreme externality and extreme internality, respectively. On the basis of his earned score, the subject was placed on a continuum which describes the individual as being more or less internal than others. In this study the terms "internal" and "external" were used to describe those subjects who had scores which fell into the upper (internal) or lower (external) half of the distribution.

In the Morrison study (1966, p. 44) split-half estimates of reliability for the CIE yielded a reliability coefficient of .69. Rosen (1974, p. 107), in a study with normal and emotionally disturbed adolescents, obtained a test-retest reliability coefficient of .87. In the present study, reliability was determined by analyzing the data for a pilot group. Test-retest data were analyzed for

evidence concerning the stability of the trait over time. An eight-month interval elapsed between test administrations. Analysis of data with n = 35 yielded a Pearson product-moment correlation of .50. This coefficient indicated a significant relationship between test administrations at the .01 level of significance (Siegel, 1956, Table P). When a split-half technique was employed, analysis of the data (n = 81), using the Spearman Brown Prophecy formula, yielded a reliability coefficient of .67.

Two of the factors to be considered in interpreting the reliability coefficients were test length and range of ability. The CIE consisted of only 23 items. Based upon a generalized format of the Spearman Brown Prophecy formula, it is suggested that if test length were doubled, a reliability coefficient of .80 would have been predicted (Thorndike and Hagen, 1969, p. 192).

The numerical value of the coefficient is dependent to a great degree on the range of scores (Karmel, 1970, p. 109). If the reliability estimate is based on a group which has a small spread in the trait being measured by the test, the coefficient will be relatively low. Using the split-half technique; the possible range for test-retest data was 23 points.

An analysis of earned scores on the CIE was used to determine whether there was a significant difference in the locus of control of children on home instruction who have different medical classifications. In addition, CIE scores were analyzed to explore the relationship between locus of control and chronological age, IQ, length of time on home instruction, academic achievement, and future placement. Lastly, CIE scores were factor analyzed for an underlying pattern of responses which might suggest a multi-dimensional interpretation of locus of control as it applies to children on home instruction.

Peabody Picture Vocabulary Test

The Peabody Picture Vocabulary Test (PPVT) is designed to provide an estimate of a subject's "verbal intelligence through measuring his hearing vocabulary" (Dunn, 1965, p. 25). The test was selected for use because of the ease of administration and its applicability to children with handicaps. The raw score can be converted to an age equivalent (mental age) and a standard score equivalent (intelligence quotient).

Calculated by the Pearson product-moment correlation, the coefficients of equivalence between the two alternate forms of the test ranged from a low of .67 at the six-year level to a high of .84 at the 17- and 18-year levels, with a median of .77 (Dunn, 1965, p. 30). Dunn also stated that, on eleven additional studies using handicapped populations, the reliability coefficients ranged from .54 to .97.

Dunn reported validity data based upon 33 studies using handicapped populations. The correlation between mental age as determined by the PPVT and the 1960 Binet is .83; intelligence quotients correlated .71. Validity data involving the PPVT and the full-scale Wechsler Intelligence Scale for Children showed a correlation of .61. On the Wechsler Adult Intelligence Scale and correlation with full-scale IQ scores was .79.

Using the scores earned on the PPVT, several relationships were explored in this study. First, a comparison of correlation coefficients was used to determine whether locus of control was more strongly related to chronological age or to mental age. Also, for each child the Peabody IQ was used to determine expected levels of achievement, which could then be compared with actual achievement scores on the Wide Range Achievement Test.

Wide Range Achievement Test

The Wide Range Achievement Test (WRAT) was standardized in 1936 and revised in 1963 as a tool for the study of achievement in reading, spelling, and computation. Raw scores may be converted to a grade score and a standard score. Each of the WRAT subtests has an average reliability of .93 (Jastak and Jastak, 1965).

The reading subtest requires the recognition and naming of letters and the reading of words. The spelling subtest requires copying designs, writing one's name, and writing single words from dictation. Where necessary, this test was modified to meet the needs of physically handicapped subjects who were unable to write. Letter and number boards, blocks, or typewriter were used to provide subjects with an alternate means of communicating their answers. The arithmetic subtest requires counting, reading number symbols, solving oral problems, and performing written computations. Again, this test was modified for subjects unable to write.

Dunn, L. Expanded manual for the Peabody Picture Vocabulary Test. Minneapolis: American Guidance Service, Inc., 1965.

Jastak, J.F. and Jastak, S.R. The Wide Range Achievement Test: Manual of Instructions. Wilmington: Guidance Associates, 1965.

Karmel, L.J. Measurement and evaluation in the schools. New York: Macmillan Co., 1970.

Morrison, B.M. The reactions of external and internal pupils to patterns of teaching behavior. Unpublished doctoral dissertation, University of Michigan, 1966.

Rosen, E.J. Tikvah: A special program of integrated summer camping and its effects upon emotionally disturbed adolescents and their normal peers. Unpublished doctoral dissertation, Teachers College, Columbia University, 1974.

Siegel, S. Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill, 1956.

Thorndike, R.L. and Hagen, E. Measurement and evaluation in psychology and education. New York: John Wiley and Sons, 1969.

APPENDIX H

DEPARTMENT OF SPECIAL EDUCATION
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

COHI AND IA REACTIONNAIRE

Name: _____ Date: _____

Area of Specialization: _____

Number of credits taken so far at Teachers College (excluding this semester) ____

Number of credits taken this semester _____

Full-time student _____

Part-time student _____

Undergraduate Education (check one)

_____ 1. Majored in special education as undergraduate.

_____ 2. Minored in special education as undergraduate.

_____ 3. Majored in general (elementary or secondary) education as undergraduate.

_____ 4. Minored in general (elementary or secondary) education as undergraduate.

_____ 5. Little or no course work in general education as undergraduate.

_____ 6. Other (explain) _____

_____

Dear Student:

The purpose of this reactionnaire is to give you an opportunity to react to the Teachers College M.A. program in your area of specialization. Listed below are the competencies--knowledge and skills--which we feel are relevant to your professional goals as a teacher and which you ought to be able to attain from your studies.

First, evaluate each competency in terms of how important you think it is to the success of educators generally in your area of special education.

Then, evaluate your preparedness for teaching in this field by indicating how adequate you think you are in each of these competencies.

Finally, there is space for you to indicate where or how you have gained most of your exposure to each competency, regardless of how adequate you think you are.

One special note: Don't judge yourself by the standards of an advanced scholar or a veteran teacher. Instead, consider your competencies in terms of reasonable expectations that are based on a pre-service training program that leads to an M.A.

Another special note: In no way will the Department of Special Education use your responses to this reactionnaire as a means of evaluating you as a student at Teachers College. That's a promise!

Sincerely yours,

Frances P. Connor
Chairman of Department

FPC:lj

I. Please circle the capital letter in Column I that reflects your opinion about the importance of each competency to one's success as a teacher of handicapped children.

A. Very important
B. Fairly important
C. Fairly unimportant
D. Unimportant
E. Don't know

II. Please circle the number in Column II that in your opinion indicates the extent of your knowledge or skill described below:

1. Very adequate (in terms of reasonable expectations)
2. Fairly adequate
3. Fairly inadequate
4. Inadequate
5. Don't know

III. Please circle the lower case letter(s) in Colum III that indicate(s) where or how most of this knowledge probably was acquired.

a. Prior to attending Teachers College
b. Professional reading and/or use of other communication media during program at Teachers College
c. Practicum experiences (including related seminars)
d. Lecture and discussion related to course work
e. Informal student-facutly contacts
f. Other

Example:

	I. Importance	II. Knowledge	III. How Attained
Foundations Knowledge of: 1. The history of the education of Special Education	A B D D (E)	1 (2) 3 4 5	a b c (d) e f

Generic Core

	I. Importance	II. Knowledge	How III. Attained
I. The Assessment of Educationally Relevant Learner Characteristics.			
Skills In:			
1. Analyzing development data and incorporating these data into a meaningful diagnosis.	A B C D E	1 2 3 4 5	a b c d e f
2. Collecting psychoeducational data and analyzing it so it contributes to an ongoing educational diagnosis.	A B C D E	1 2 3 4 5	a b c d e f
3. Relating diagnostic materials to everyday classroom situations and educational programming.	A B C D E	1 2 3 4 5	a b c d e f
4. Administering and interpreting educationally significant tests.	A B C D E	1 2 3 4 5	a b c d e f
5. Constructing non-standardized assessment instruments.	A B C D E	1 2 3 4 5	a b c d e f
6. Employing functional diagnostic procedures in assessing children.	A B C D E	1 2 3 4 5	a b c d e f
7. Selecting an appropriate diagnostic approach for a given problem.	A B C D E	1 2 3 4 5	a b c d e f
8. Contributing to an interdisciplinary team assessment of a child.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
II. The Development of Appropriate Educational and Instructional Strategies Based Upon the Diagnostic Materials. Skills In: 1. Developing specialized curricula for exceptional children in the framework of general school curricula.	A B C D E	1 2 3 4 5	a b c d e f
2. Organizing the conditions of learning so that each child will make maximum educational and social progress.	A B C D E	1 2 3 4 5	a b c d e f
3. Sequentially implementing instructional strategies and systems.	A B C D E	1 2 3 4 5	a b c d e f
4. Modifying instructional strategies in accordance with evolving experience.	A B C D E	1 2 3 4 5	a b c d e f
5. Using human resources to evolve an educational plan for exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
6. Using material resources to evolve an educational plan for exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
7. Reorganizing learning experience as additional diagnostic data and classroom experience become available.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
8. Applying Research oriented approaches to ascertain the effectiveness of the prescribed educational strategies.	A B C D E	1 2 3 4 5	a b c d e f
III. The Implementation of Special Education Strategies in the Classroom. Skills In: 1. Developing auditory skills in children in the classroom within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
2. Developing visual functioning skills in children in the classroom within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
3. Developing motor skills in children within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
4. Developing perceptual skills in children in the classroom within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
5. Developing reading skills in children in the classroom within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
6. Developing computation skills in children in the classroom within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
7. Developing social and behavioral skills in children in the classroom within the framework of the curricular and behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
8. Selecting appropriate materials and aids to facilitate learning in the classroom while implementing the educational strategies.	A B C D E	1 2 3 4 5	a b c d e f
9. Using appropriate materials and aids to facilitate learning in the classroom while implementing the educational strategies.	A B C D E	1 2 3 4 5	a b c d e f
10. Adapting curricular activities to make them compatible with the strengths and limitations of exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
11. Developing environmental settings which improve the progress of exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
12. Providing essential support services to exceptional children attending regular classrooms.	A B C D E	1 2 3 4 5	a b c d e f
13. Developing and teaching special content in the arts.	A B C D E	1 2 3 4 5	a b c d e f
14. Developing and teaching special content in daily living skills.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
15. Developing and teaching special content in prevocational skills.	A B C D E	1 2 3 4 5	a b c d e f
16. Conducting or supplementing instruction in communication areas in which special adaptations are required:			
a. oral or other expressive communication.	A B C D E	1 2 3 4 5	a b c d e f
b. language,	A B C D E	1 2 3 4 5	a b c d e f
c. listening.	A B C D E	1 2 3 4 5	a b c d e f
d. writing.	A B C D E	1 2 3 4 5	a b c d e f
17. Creating special instructional materials when commerically made ones are not available.	A B C D E	1 2 3 4 5	a b c d e f
18. Using the community and its resources for instructional purposes.	A B C D E	1 2 3 4 5	a b c d e f
IV. Understanding and Management of Behavior.			
Skills In:			
1. Analyzing and understanding human behavior and development, in general.	A B C D E	1 2 3 4 5	a b c d e f
2. Analyzing and understanding the behavior and development of exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
3. Providing educational experiences for exceptional children taking into account the psychosocial components in the teaching-learning process.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
4. Shaping student behaviors which are favorable to the learning process.	A B C D E	1 2 3 4 5	a b c d e f
5. Promoting the socialization of exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
6. Applying group dynamics methods to handicapped children to promote appropriate and functional group behaviors.	A B C D E	1 2 3 4 5	a b c d e f
7. Functioning as a change agent in an instructional setting.	A B C D E	1 2 3 4 5	a b c d e f
V. Guidance and Counseling. Skills In: 1. Assisting parents to contribute to the development of exceptional children.	A B C D E	1 2 3 4 5	a b c d e f
2. Assisting pupils on a one-to-one basis as well as in groups to overcome barriers to their learning and development.	A B C D E	1 2 3 4 5	a b c d e f
3. Serving as an advocate of handicapped students in the community, the school, and the family.	A B C D E	1 2 3 4 5	a b c d e f
4. Contributing to the child's preparation for adult social and vocational roles.	A B C D E	1 2 3 4 5	a b c d e f
5. Facilitating career development through the instruction related to work habits, vocationally-related skills, and attitudes toward work.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	III. How Attained
6. Collaborating with rehabilitation and other community agency programs concerned with preparing the exceptional child for adult living.	A B C D E	1 2 3 4 5	a b c d e f
7. Serving as coordinator of a school-community team working on behalf of the handicapped child.	A B C D E	1 2 3 4 5	a b c d e f
VI. The Role of the Professional Educator. Skills In: 1. Developing a spirit of inquiry, habits of knowing, and a readiness to change.	A B C D E	1 2 3 4 5	a b c d e f
2. Identifying with the field of special education and participating in its professional programs.	A B C D E	1 2 3 4 5	a b c d e f
3. Serving community groups for the handicapped by providing consultation, encouragement, and professional guidance.	A B C D E	1 2 3 4 5	a b c d e f
4. Engaging in professional behaviors in relation to handicapped children, their parents, and the community.	A B C D E	1 2 3 4 5	a b c d e f

Department of Special Education
Teachers College, Columbia University

ED STUDENT REACTIONNAIRE

Name: _____ Date: _____

Area of Specialization: _____

Number of credits taken so far at Teachers College (excluding this semester) _____

Number of credits taken this semester _____

Full-time student _____

Part-time student _____

Undergraduate Education (check one)

_____ 1. Majored in special education as undergraduate.

_____ 2. Minored in special education as undergraduate.

_____ 3. Majored in general (elementary or secondary) education as undergraduate.

_____ 4. Minored in general (elementary or secondary) education as undergraduate.

_____ 5. Little or no course work in general education as undergraduate.

_____ 6. Other (explain) _____

_____

Dear Student:

The purpose of this reactionnaire is to give you an opportunity to react to the Teachers College M.A. program in your area of specialization. Listed below are the competencies--knowledge and skills--which we feel are relevant to your professional goals as a teacher and which you ought to be able to attain from your studies.

First, evaluate each competency in terms of how important you think it is to the success of educators generally in your area of special education.

Then, evaluate your preparedness for teaching in this field by indicating how adequate you think you are in each of these competencies.

Finally, there is space for you to indicate where or how you have gained most of your exposure to each competency, regardless of how adequate you think you are.

One special note: Don't judge yourself by the standards of an advanced scholar or a veteran teacher. Instead, consider your competencies in terms of reasonable expectations that are based on a pre-service training program that leads to an M.A.

Another special note: In no way will the Department of Special Education use your responses to this reactionnaire as a means of evaluating you as a student at Teachers College. That's a promise!

Sincerely,

Frances P. Connor
Chairman of Department

FPC:lj

I. Please circle the capital letter in Column I that reflects your opinion about the importance of each competency to one's success as a teacher of handicapped children.

A. Very important.
B. Fairly important.
C. Fairly unimportant.
D. Unimportant.
E. Don't know.

II. Please circle the number in Column II that in your opinion indicates the extent of your knowledge or skill described below:

1. Very adequate (in terms of reasonable expectations).
2. Fairly adequate.
3. Fairly inadequate.
4. Inadequate.
5. Don't know.

III. Please circle the lower case letter(s) in Column III that indicate(s) where or how most of this knowledge probably was acquired.

a. Prior to attending Teachers College
b. Professional reading and/or use of other communication media during program at Teachers College.
c. Practicum experiences (including related seminars).
d. Lecture and discussion related to course work.
e. Informal student-faculty contacts.
f. Other.

Example:

	I. Importance	II. Knowledge	III. How Attained
Foundations Knowledge of:			
1. The history of the education of Special Education.	A B C D (E)	1 (2) 3 4 5	a (b) c d e f

Emotionally Disturbed

	I. Importance	II. Knowledge	III. How Attained
I. Foundations Knowledge Of: 1. The medical model of normal behavior.	A B C D E	1 2 3 4 5	a b c d e f
2. The statistical model of normal behavior.	A B C D E	1 2 3 4 5	a b c d e f
3. The phenomenological model of normal children.	A B C D E	1 2 3 4 5	a b c d e f
4. Present day socio-cultural content of deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f
5. Biogenetic variables influencing deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f
6. Psychodynamic approaches to the understanding of deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f
7. A social learning approach to the understanding of deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f
8. A phenomenological approach to the understanding of deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f
9. Developing a rationale for psychoeducational treatment of deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
10. Conceptual differences between insight therapy and behavior therapy.	A B C D E	1 2 3 4 5	a b c d e f
11. Ethical issues relating to insight therapy and behavior therapy.	A B C D E	1 2 3 4 5	a b c d e f
12. Deviant behavior in the urban ghetto.	A B C D E	1 2 3 4 5	a b c d e f
13. Neurological function and dysfunction.	A B C D E	1 2 3 4 5	a b c d e f
14. Psycho-social concomitants of under-achievement at school.	A B C D E	1 2 3 4 5	a b c d e f
II. Assessment Procedures Knowledge Of: 1. Standardized measures of cognitive functioning.	A B C D E	1 2 3 4 5	a b c d e f
2. Conceptual frameworks of different classroom observation systems.	A B C D E	1 2 3 4 5	a b c d e f
3. Theoretical rationale of specific tests of human functioning.	A B C D E	1 2 3 4 5	a b c d e f
Skills In: 1. Understanding diagnostic information regarding deviant behavior.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	How III. Attained
2. Formulating behavioral analyses of deviant behavior in social contexts.	A B C D E	1 2 3 4 5	a b c d e f
3. Diagnosing learning disabilities.	A B C D E	1 2 3 4 5	a b c d e f
4. Obtaining relevant information on family background.	A B C D E	1 2 3 4 5	a b c d e f
5. The analysis of affective aspects of teacher-pupil interaction.	A B C D E	1 2 3 4 5	a b c d e f
6. Understanding dynamics of pupils' group behavior in school setting.	A B C D E	1 2 3 4 5	a b c d e f
7. The analysis of behavior systems in the classroom.	A B C D E	1 2 3 4 5	a b c d e f
8. Monitoring on-task and off-task behavior of children.	A B C D E	1 2 3 4 5	a b c d e f
9. Recording meaningful anecdotal information on classroom life.	A B C D E	1 2 3 4 5	a b c d e f
10. Utilizing diagnostic information as a basis for educational planning.	A B C D E	1 2 3 4 5	a b c d e f
11. Utilizing measurement instruments for educational evaluation.	A B C D E	1 2 3 4 5	a b c d e f
12. Designing informal testing procedures for diagnostic purposes.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	III. How Attained
13. Modifying standardized test procedures to determine pupils' functioning levels.	A B C D E	1 2 3 4 5	a b c d e f
14. Writing specific and meaningful behavioral objectives.	A B C D E	1 2 3 4 5	a b c d e f
III. The Teacher as a Professional Agent of Change Knowledge Of: 1. Contribution of insight therapy to the teacher's craft.	A B C D E	1 2 3 4 5	a b c d e f
2. Contributions of behavior therapy to the teacher's craft.	A B C D E	1 2 3 4 5	a b c d e f
3. Community agencies to which referrals can be made.	A B C D E	1 2 3 4 5	a b c d e f
4. Professional issues in special education.	A B C D E	1 2 3 4 5	a b c d e f
5. Necessary repertoire of teaching strategies.	A B C D E	1 2 3 4 5	a b c d e f
6. Curriculum scope and sequence in basic skills.	A B C D E	1 2 3 4 5	a b c d e f
7. Human resources available for supportive services.	A B C D E	1 2 3 4 5	a b c d e f
8. Prominent psychoeducational programs for behaviorally deviant children.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	III. How Attained
9. School administrative structure.	A B C D E	1 2 3 4 5	a b c d e f
Skills In:			
1. Recognizing areas of overlap between the teacher's role and that of other services.	A B C D E	1 2 3 4 5	a b c d e f
2. Recognizing the unique aspects of the teacher's role.	A B C D E	1 2 3 4 5	a b c d e f
3. Understanding the teacher's role in the total treatment process.	A B C D E	1 2 3 4 5	a b c d e f
4. Adjusting professional role to deal effectively with inner city problems.	A B C D E	1 2 3 4 5	a b c d e f
5. Describing effects of teacher planning on classroom climate.	A B C D E	1 2 3 4 5	a b c d e f
6. Participating in case conferences with professionals from helping services.	A B C D E	1 2 3 4 5	a b c d e f
7. Participating as a member of a team in curriculum planning.	A B C D E	1 2 3 4 5	a b c d e f
8. Planning educational experiences appropriate for deviant children.	A B C D E	1 2 3 4 5	a b c d e f
9. Locating appropriate teaching materials.	A B C D E	1 2 3 4 5	a b c d e f
10. Creating original teaching materials.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	III. How Attained
11. Planning remedial intervention where necessary.	A B C D E	1 2 3 4 5	a b c d e f
12. Keeping abreast of professional literature in the field.	A B C D E	1 2 3 4 5	a b c d e f
13. Analyzing own classroom habits as a step toward self-improvement.	A B C D E	1 2 3 4 5	a b c d e f
IV. The Teacher as Classroom Strategist Skill In: 1. Application of ego-supportive techniques in teaching.	A B C D E	1 2 3 4 5	a b c d e f
2. Shaping pupil behavior systematically.	A B C D E	1 2 3 4 5	a b c d e f
3. Flexible use of reinforcement tactics for behavior control.	A B C D E	1 2 3 4 5	a b c d e f
4. Arousing pupil interest in a learning task.	A B C D E	1 2 3 4 5	a b c d e f
5. Maintaining pupil engagement in learning tasks.	A B C D E	1 2 3 4 5	a b c d e f
6. Applying precision teaching strategies for individualization.	A B C D E	1 2 3 4 5	a b c d e f
7. Dealing with special learning and behavior styles of the inner city child.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	III. How Attained
8. Grouping for instruction flexibility.	A B C D E	1 2 3 4 5	a b c d e f
9. Applying special remedial techniques where needed.	A B C D E	1 2 3 4 5	a b c d e f
10. Applying a wide repertoire of instructional tactics.	A B C D E	1 2 3 4 5	a b c d e f
11. Using a variety of sensory modalities for instructional input.	A B C D E	1 2 3 4 5	a b c d e f
12. Enabling pupils' use of modalities for instructional input.	A B C D E	1 2 3 4 5	a b c d e f
13. Flexible shifts of planned strategies on the basis of pupil responses.	A B C D E	1 2 3 4 5	a b c d e f
14. Helping pupils exercise increasing control over aggressive impulses.	A B C D E	1 2 3 4 5	a b c d e f
15. Building social skills in the classroom.	A B C D E	1 2 3 4 5	a b c d e f
16. Organizing an effective physical setting for learning (e.g., space, equipment).	A B C D E	1 2 3 4 5	a b c d e f
17. Helping children use materials and equipment constructively.	A B C D E	1 2 3 4 5	a b c d e f

	I. Importance	II. Knowledge	III. How Attained
18. The effective use of instructional resources in the classroom.	A B C D E	1 2 3 4 5	a b c d e f
19. Modifying existing materials to suit individual differences among pupils.	A B C D E	1 2 3 4 5	a b c d e f
20. Lowering or raising the difficulty level of learning tasks in accordance with pupils' response patterns.	A B C D E	1 2 3 4 5	a b c d e f

APPENDIX I

GRADUATE QUESTIONNAIRE

Name _____

Address _____

Highest degree received at TC _____ _____ _____
(month) (year)

Specialization in which trained at TC _____ Type of Certificate(s) held _____

Specialization in which working _____

Preparation Type: In-Service* ____ Pre-Service ____; Full-time ____ Part-time ____

Financial Support Data:

While at TC, did you receive financial support? Yes _____ No _____
If yes, please complete the following:

USOE Traineeship (No. of Points) _____ T.C. Loan (Amount) $ _____
State Scholarship (No. of Points) _____ State Loan (Amount) $ _____
T.C. Scholarship (No. of Points) _____ Other (Amount) $ _____
Tuition and fees (No. of Points) _____

Current Position Placement:

1. Position Type:
   - Administrator _____
   - College teacher/researcher _____
   - Consultant/itinerant tchr. _____
   - Resource room teacher _____
   - Special class teacher _____
   - Speech Pathologist _____
   - Supervisor _____
   - Vocational educator _____
   - Physical educator _____
   - Recreation specialist _____
   - Audiologist _____
   - Student _____
   - Unemployed _____
   - Regular education position _____
   - Other (specify_____
4. Position address: _____
   _____
   _____

2. Education Level:
   - Pre-School _____
   - Elementary _____
   - Secondary _____
   - Post-secondary _____
   - Combined _____
3. Placement Type:
   - Clinic/hospital _____
   - Community Agency _____
   - College/University _____
   - Federal Agency _____
   - Private practice _____
   - Pub. Sch. District _____
   - Residential Ctr. _____
   - Special Day School _____
   - Residential/day sch. _____
   - State Agency _____
5. Setting:
   - Urban _____
   - Suburban _____
   - Rural _____
   - Residential _____
   - (wide geographical representation) _____

*Had Teaching experience prior to enrollment in this, your most recent, degree program.

6. Please indicate how many exceptional students of each age group in each area you are teaching/supervising. (Include multiple-handicapped individuals in multi-handicapped only.) Are your services to children direct (teaching) _____ or indirect (supervisory) _____?

	Infants (0-3 yrs)	Pre-School (3-6 yrs)	Elementary (6-12 yrs)	Jr.Sr. High (12-21 yrs)	Adult (21+)
Mentally Retarded					
Hearing Impaired					
Visually Handicapped					
Emotionally Disturbed					
Crippled and Other Health Imapired					
Learning Disabilities					
Multi-Handicapped					
Deaf-Blind					
Cross-Categorical					
Other _____ (Please specify)					

7. Rate, by quartile, your performance on the job as compared with other special educators you have observed?
(Circle One)

Lower Quartile	Second Quartile	Third Quartile	Upper Quartile
0-25%	26% - 50%	51% - 75%	76% - 100%

Inadequate _____ Superior

8. Rate, by quartile, how well your TC program prepared you for your present position?
(Cricle One)

Lower Quartile	Second Quartile	Third Quartile	Upper Quartile
0 - 25%	26% - 50%	51% - 75%	76% - 100%

Inferior _____ Superior

9. The program in my specialization at Teachers College might be strengthened by:

_____

_____

_____

_____

_____

10. Comment(s): _____

_____

_____

_____

_____

_____

_____

11. If you anticipate employment within the near future, state data of commencement of employment and estimate answer for question 6. To be employed as of:

_____

Thank you